

Manufacturers Record

Exponent of America



\$6.50 per Year.
Single Copy, 15 Cents.

Baltimore, Md.,
MAY 8, 1919

BRIGHT OUTLOOK FOR AMERICAN BUSINESS

From all quarters of the country the most optimistic reports regarding business conditions are continually coming in. The outlook is most encouraging in practically every line. The spirit of optimism is in the air, and it is the confident belief of leaders in industry and finance that an era of unprecedented prosperity is ahead.

Even now many public and private undertakings are being crowded to completion. There is no difficulty in financing proper improvements, and an ever-broadening market for bond issues reveals the temper of the times. Enormous good road construction is in hand and is being planned, work with which the entire country appears to be deeply concerned. There is a dearth of dwelling-houses all over the land, and vast building activities cannot be long delayed. Everywhere there is a lessening in complaints of unemployment, and the prediction is freely made that before the year is out there may be an actual shortage of labor.

In all this present activity and optimism for the future the South has taken a leading part. The Construction Department of the Manufacturers Record bears testimony to this fact, for the construction news we publish each week, giving projects and undertakings planned and under way, has more than doubled in space since the armistice was signed.

There is room only for optimism in a survey of the field.

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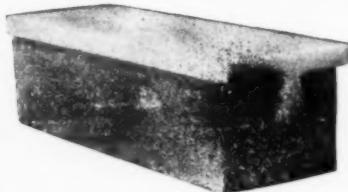
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VOL. LXXV, No. 19
WEEKLY.

BALTIMORE, MAY 8, 1919

\$6.50 A YEAR.
{ SINGLE COPIES, 15 CENTS.

PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS RECORD PUBLISHING CO.

RICHARD H. EDMONDS, Pres.
FRANK GOULD, Vice-Pres.
RICHARD H. EDMONDS, Editor

BRANCH OFFICES:

CHICAGO, 11 So. La Salle St. NEW YORK, 52 Broadway
ST. LOUIS, 608 Century Bldg. BOSTON, 734 Old South Bldg.

SUBSCRIPTION RATES:

\$6.50 a year (in advance); six months, \$3.50; three months, \$2 for Canada,
Mexico, Cuba, Porto Rico, Hawaii and the Philippines. For Canada,
add postage \$2 a year. For other foreign countries add postage \$4 a year.
Back numbers, if available and not over one month old, 15 cents each.
From one month to six months old, 50 cents each; over six months old, \$1 each.
In ordering change of address, give old as well as new address.

[Entered at the Baltimore Postoffice as second-class matter.]

In order to avoid delays, all correspondence pertaining to news or advertising
matters should be addressed directly to the Manufacturers Record, Baltimore, Md., and not to individual editors, officers, employees or any branch office.

**"Who saves his country, saves himself, saves all things,
and all things saved do bless him."**

**"Who lets his country die, lets all things die, dies himself
ignobly."**

"And all things dying curse him."—Senator Ben. H. Hill.

THE SUPERLATIVE DEGREE.

KANSAS is modest, and boasting is out of its line. Therefore it is under a handicap to describe the situation in which it finds itself as to the wheat this year. The biggest acreage; the best stand; the brightest prospect; the highest percentage as to condition; the clearest color; the tallest blades; the cleanest from weeds; the freest from bugs; the wettest soil; the most favorable weather; the greatest promise for the most extraordinary yield—words fail.

In the language of the short-grass country alone is found satisfaction: "It's the goldernest, finest thing you ever saw."

And Kansas expects to reap the bustingest price ever received for a wheat crop.—Kansas City Star.

And yet the Governor of Kansas would rob the cotton growers of the South of the privilege of increasing their food production and decreasing their cotton crop, in order to save themselves from having to buy so much wheat as formerly "at the bustingest price" which will bring boundless prosperity to Kansas, but will be hard on the non-wheat-producing States.

SHALL WE FORCE TREATIES TO BECOME SCRAPS OF PAPER?

ON the face of it, Italy would seem to have a good case. If we scrap treaties that do not conform to our ideas, and especially treaties with the making of which we had nothing to do, what kind of a precedent do we establish? Because they were made in secret cannot alter their validity. There has never been a meeting enveloped with such dense, dark secrecy as that of the Peace Conference itself. Even the nations most interested were kept in dense ignorance of what was going on, and we were promised "open covenants, openly arrived at." The "openness" has not been strikingly apparent.—Tampa (Fla.) Times.

The Tampa Times, one of the leading Democratic papers of the South, generally sees the truth and states it clearly, as it has done in this case.

THE MANY CHANGES IN THE LEAGUE OF NATIONS COVENANT.

THAT there was great need for radical changes in the covenant in the proposed League of Nations, whether the league be finally adopted or not, is made very evident by the statement of President Wilson on April 28 when in presenting the text of the new covenant he gave a list of the changes that have been made. As these changes have been published in detail through the daily papers we shall not undertake to repeat them, but merely as indicative of how many and how radical were the changes and the additions we take from President Wilson's statement (omitting the details that followed), the opening lines of each paragraph as mentioned by him exactly in the order in which he has given them.

If our readers will bear in mind that the following quotations are taken directly from President Wilson's statement, they will be impressed with the many changes that were made in the covenant which this country had been told must be adopted exactly as it was first presented. President Wilson's statement is as follows:

"The first paragraph of article one is new."
"The third paragraph of article one is new."
"The second paragraph of article four is new."
"The two last paragraphs of article four are new."
"The first paragraph of article five is new."

"The second paragraph of article six has had added to it that a majority of the assembly must approve the appointment of the secretary general."

"The first paragraph of article seven names Geneva as the seat of the League, and is followed by a second paragraph which gives the council power to establish the seat of the League elsewhere should it subsequently deem it necessary."

"The third paragraph of article seven is new."
"The second paragraph of article thirteen is new."
"The eighth paragraph of article fifteen is new."
"The last paragraph of article sixteen is new."
"Article twenty-one is new."

"The second paragraph of article twenty-two inserts the words with regard to mandatories, 'and who are willing to accept,' thus explicitly introducing the principle that a mandate cannot be forced upon a nation unwilling to accept it.

"Article twenty-three is a combination of several former articles and also contains the following. * * *

"Article twenty-five specifically mentions the Red Cross as one of the international organization which are to connect their work with the work of the League.

"Article twenty-six permits the amendment of the covenant by a majority of the States composing the assembly, instead of three-fourths of the States, though it does not change the requirement in that matter with regard to the vote in the council."

"The second paragraph of article twenty-six is also new."

"And the annex is added giving the names of the signatories of the treaty, who become members, and the names of the States invited to accede the covenant. These are all the changes, I believe, which are of moment."

GERMAN-AMERICANS WHO WILL NOT SEE THE TRUTH.

New Smyrna, Fla., April 9, 1919.

Editor Manufacturers Record:

I received a copy of the MANUFACTURERS RECORD which I ordered, expecting it a true good paper, but it has not come up to what I had expected. It seems that you try to run the Germans down, for which I see no reason, for the German people I think are as good as anyone. My father and mother were born in Germany and I have been raised and lived among them, and have found them the best people I have found so far, and if you desire to build up the Southern States, then try to get as many Germans as possible to come. I can't see that the Germans should be made responsible for what is destroyed in France or other countries. There is no doubt that those who fight the Germans have destroyed just as much as the Germans. Last year the report came that the English burned every town they had lived in, now they try to make the Germans responsible for that.

I enclose you herewith \$1.00 in cash and call the RECORD off and hope that will pay for the copy and your trouble.

FERD. NORDMANN.

For the good, honest-hearted Germans of olden days, and there were many of that kind who settled in this country, we have sympathy, provided they are now thoroughly American in spirit. It is somewhat difficult for some of these people, as it doubtless is for the writer of the foregoing letter, to understand how the people of their native land or the land of their parents have sunk to such depths of degradation as we have seen during the last five years. Some of them cannot yet understand, as does Otto H. Kahn, the great German-born New York banker, who early in the war took the ground that during the last twenty-five years in his visits to his native land he had seen with increasing horror that the entire German nation "had sold its soul to the devil."

Dr. Muehlion, former director of Krupps, is equally strong in denunciation of his own people, for he has said that the entire German nation, from the highest to the lowest, is a nation of liars, who lie or tell the truth simply in accordance with which ever seems to be most profitable at the time.

It would seem that Germans, or men of German birth living in this country like Mr. Nordmann, would have realized from the statements of such men as Kahn and Muehlion and others that their nation was no longer composed of the class of people whom they once loved and honored. Here is an apparently intelligent man, after four years of the most frightful crimes known to human history, committed by Germans and glorified in by the German people, still claiming that the Germans "are as good as anybody else." Indeed, he says that they "are the best people that he has found," and he adds that if the MANUFACTURERS RECORD desires "to build up the South, it should seek to get as many Germans as possible to come to this section."

May heaven save the South from being cursed by the incoming of Germans! May it be safe forever from the presence of any more men or women who would apologize for or seek to overlook the atrocious crimes committed by the German armies with the full approval of the German people and upheld by many of the Germans in this country. We would rather see the South forever doomed to poverty and honor than to German-made prosperity and dishonor. Here is a man who cannot see that the Germans should be made responsible for the destruction wrought in France and elsewhere!

When the accursed armies of a nation of liars and looters, dishonoring womanhood as never before in human history, went forth to war for the purpose of murdering millions in order that they might rob France and Belgium, and that ultimately they might conquer and loot the world, and when in this campaign they stained the pages of human history with blacker crimes than the world had ever known, they found many apologists among so-called German-Americans. Is this due to mental blindness, that these men living in America will not see, or is it due to the training of generations which has made such people believe that any crime committed by the

German army is justifiable? Surely we may well hope that no more Germans will be permitted to come to America until the Germans now living in America are so completely changed in their mentality that they will no longer uphold in thought or by word that army of lecherous murderers, whose crimes were gloried in by the German people, the only nation on earth that has for years deified war, and made war for the express purpose of enriching itself at the expense of others.

NOT A DIVINE DOCTRINE.

A MINISTER, writing in the Tampa (Fla.) Tribune in regard to the question of Bolshevism and kindred matters, says:

"Take the advice given two thousand years ago by a very wise man: 'If this thing is of men, it will come to naught; but if it is of God, ye cannot overthrow it.' And we cannot possibly call Bolshevism any harder names than were hurled at Christianity in the days of its birth."

This minister typifies a good deal of the shallow thinking of the day. He quotes a statement which appears in the Bible, but which is not a statement made by God nor by one of God's inspired writers. It is true that the man who made the statement may have been a "wise man," and yet there is no great proof in this statement of his wisdom. If we were to accept the doctrine quoted as a correct line of policy for mankind, we would be compelled to accept Mormonism as of God because Mormonism has not yet come to naught; we would have to accept Mohammedanism as of God, since Mohammedanism has not yet come to naught.

Indeed, if we were to judge by the statement which the Florida minister sets up and which some other unthinking people sometimes take to be of Divine origin, every so-called religious movement and every political activity must be left unopposed because if it is from God opposition is futile, and if it is not from God, it will die of its own account. It is not a far stretch of imagination to say that if this doctrine were generally adopted it would be perfect folly to fight the whiskey traffic because if the whiskey traffic was not of God it would come to naught; it would be folly to fight any of the wiles of the Devil because if they were not of God they would soon come to naught.

When we see how men professing to be leaders of public thought are themselves so easily misled, it is scarcely to be wondered at that the world is so full of false teachings, so full of Bolshevism and Socialism and all the rank isms of the hour.

NEW ORLEANS BANK ESTABLISHES FARM SERVICE BUREAU.

WITH a realization that the prosperity of the banker, the merchant and others depends largely on the farmer making a fair profit, the Agricultural Service Bureau of the Whitney-Central National Bank, New Orleans, has been established to stimulate better farming methods and to induce the farmers to study their problems from a dollars-and-cents standpoint. The work has been placed in charge of Stanley F. Morse, an agriculturist who is associated with several large commercial farming enterprises.

The Business-Farming Bulletin is published by the bureau for the purpose of emphasizing such important matters as better preparation of corn land, the more extensive use of fertilizers, the planting of peas or velvet beans in all corn, the use of labor-saving implements producing greater results in shorter hours, planting ample feed crops for stock, raising food crops for the farmer's own family and his own help, a simple system of account keeping and like subjects.

The service is furnished without cost to all who are interested in problems of this character.

How America Was Saved and the Lesson to Be Learned Therefrom.

PRESIDENT WILSON on December 2, 1918, in his address to Congress, paid to the great industrial interests of the country a tribute worthy to be remembered. In that address, referring to the wonderful work of the nation in creating an army and placing it in Europe, he said:

"I need not tell you what lay back of this great movement of men and material. It is not invidious to say that back of it lay a supporting organization of the industries of the country and of all its productive activities more complete, more thorough in method and effective in results, more spirited and unanimous in purpose and effort, than any other great belligerent had ever been able to effect."

This well-deserved tribute to the great industrial activities of America should prompt the question. How did it come to pass that America, with one-fourth of Europe's population, was producing about one-half of all the coal, iron and steel and more than 60 per cent. of all the oil and cotton of the world?

Was this due to any greater inherent qualities of business acumen in Americans than in people of England and France? No. Was it due to any greater natural resources than Europe? In part, yes; but Europe has not yet much more than barely touched its potentialities for industrial progress.

There are many reasons which in part explain our preponderating power in industry and agriculture. They touch on our form of government, on our cosmopolitan population, on our civil and religious liberty, but all of these combined would never have brought about the marvelous industrial expansion which gave us the power to win the war if we had not built up our industrial strength by a wise protective tariff policy. To this protection system America and the world owe their salvation from Germany's domination.

The free trader may hate to admit it, but down in his heart he knows that our marvelous manufacturing growth was due to our protective tariff system. Indeed, many free traders have been willing to admit that truth, but have tried to save their face by claiming that a protective tariff caused too great a stimulation to our manufacturing interests and unduly favored them. But now they must confront the fact that without these vast industries we would have been unable to stem the onrush of barbarism.

The outcome has proven beyond question the wisdom of those who for years labored to uphold the protective tariff system, without which practically all our industries would have been as weak and helpless as the dye and the potash and kindred interests. We were without a dye industry because we had listened to the pro-Germans, who had carried on a propaganda against an adequate tariff on dyes, and Americans had eagerly jumped to the German bait and were caught as suckers. We were without a merchant marine because Americans had been played as suckers and readily took the bait when a German steamship company among other activities kept on its payroll an important member of the Associated Press staff at Washington in order that he might help Germany's propaganda work against the development of our mercantile marine. Only by accident was it discovered some years ago that for years a German steamship line had been paying this man \$3000 a year. American papers and people were eagerly swallowing the stuff he was putting out against any fiscal policy looking to a larger merchant marine.

These are but typical illustrations of how a protective tariff policy was fought by foreign interests and how free-trade Americans were caught in their net.

We are now coming to a time when the American people must decide whether they will re-establish on solid grounds our protective system in order to develop and strengthen our industrial interests and safeguard us from dependence upon

other countries, or whether we shall, under the leadership of the pro-German propaganda, seek to tear down our tariff system and destroy the very industries whose existence made possible our success in the war.

The South has much at stake. It needs a protective tariff more than any other section, for its industries are weaker than those of the North and West, and they are more vulnerable to attack by importations from abroad. All the South's vast natural resources in minerals will be of but little avail unless the South utilizes them, and this it cannot do except through a protective tariff.

Where will the people and the politicians of the South stand on such an issue?

THE PEANUT AND PEANUT OIL INDUSTRY MENACED BY THE ORIENT.

THE peanut industry, which was becoming a big factor in the agricultural life of the South, and the peanut oil business, one of the growing activities in this section, are seriously threatened by the heavy importations of peanuts and of peanut oil from the Orient.

The United States Department of Agriculture has just issued a report showing that during 1918 this country imported from the Orient, and mainly from Japan, 68,281,006 pounds of peanuts, as compared with 10,366,569 pounds in 1913. The Department calls attention to the fact that rumors of large importations of Oriental peanuts during the past winter caused considerable alarm in the producing districts, but it expresses the thought that the supply in the East is not large and that Europe will again become a large importer of peanuts from the Orient. However, it adds:

"Recent developments in the trade in raw materials will seem to indicate that Japanese merchants may try to control the markets in order to maintain and protect the vegetable oil industry, which underwent a prodigious growth in Japan during the war and may prove difficult to continue successfully under peace conditions. Kobe already is considered the probable market of the Orient for vegetable oils, and it may be the purpose of the Japanese to make this market the clearing-house also for large quantities of the raw materials, including peanuts, which are used in the production of vegetable oil. * * *

"While importation of peanuts for this season may not exceed pre-war figures, the growth of the vegetable oil industry throughout the Orient and the consequent encouragement for the production of raw materials are actively to be reckoned with in the future by both dealers and producers."

During the last few years the peanut industry has been growing very rapidly in this country. In many parts of the South it was becoming a staple crop, taking the place of cotton in the boll-weevil sections. The production of peanuts has been furnishing the basis for a thriving oil industry, but the prospect of the peanut growers of the South and of the peanut oil producers is now seriously endangered by the heavy development of importations of peanuts and peanut oil from Japan, China and India. The South will thus soon face the acute situation of deciding whether it will be willing to see this thriving industry destroyed and the peanut growers impoverished through the importation of peanuts raised by the cheap labor of China and Japan, or whether it will demand a protective tariff on peanuts and on vegetable oils sufficient to continue the prosperity of these vitally important industries. Had we entered the League of Nations as proposed, Japan might have had the right to vote as to whether we could put a protective tariff on anything or whether we could protect ourselves from Japanese and Chinese immigration or the importation of Japanese and Chinese products without limit. We wonder how many of the people who are upholding the covenant of the League of Nations as first proposed recognize the wide ramifications of its possibilities for harm to America and its interests.

THE BOLSHEVIST LEADERS AS SEEN BY LONDON TIMES.

AN American engaged in diplomatic work in Europe, in a letter to the MANUFACTURERS RECORD written from London on March 31, referring to the Bolsheviks, said:

"They seem to be nothing more than a lot of gunmen, cut-throats and thieves. The Allies certainly ought to go into Russia with a large enough army to kill every one of them, and rid the world of such an inhuman pack of wolves."

"It looks as if there will be a preliminary peace by Easter. What the ultimate result will be only the Good Lord knows."

"If they had adopted the iron rule and resorted to stern tactics from the beginning, as suggested by you, we should have had excellent results by this time. But they didn't."

In his letter he encloses an editorial from the London Times reviewing the leading Bolshevik leaders in Russia as follows:

The whole policy of the Allies towards Bolshevism, our Paris correspondent assured us yesterday, is now being considered by the Council of Four. No larger question, no more searching test of principle, can present itself to them. Bolshevism is the negation of the ordered freedom for which the democracies have made war. It aims avowedly, not at liberty for all, but at the dictatorship of a class. The class is, indeed, the most numerous class—the proletariat—but, as the proletariat cannot themselves exercise their theoretic sovereignty, a handful of self-chosen delegates wield it, unsolicited and unauthorized, in the popular name. Who are the men who, within two years, have reduced Russia from her place among the Great Powers of Europe to the welter of anarchy, murder, civil war, bankruptcy, pestilence, and famine in which she is writhing today? Are they thinkers of high and original genius revealing new doctrines to mankind? Are they great practical reformers, building up, course by course, a stable fabric out of the ruins they have made? What is the secret of their power, what their object, and what manner of men are they?

The articles which we have lately published under the title of "Bolshevist Portraits" throw some light upon these questions. The conclusion to which they point is that the Bolshevik leaders are for the most part revolutionists of a very commonplace and uninteresting character. The correspondent to whom we owe them places Lenin head and shoulders above the rest of the party, yet it is hard to discern proofs of remarkable ability in Lenin's career. His greatest feat seems to have been that he ousted the wordy idealist Kerensky, and has kept the despotism ever since. The failure of the Russian arms and the help and gold of Germany made the achievement comparatively easy for a resolute man, and Lenin's resolution is the resolution of a fanatic. Of noble birth, like so many other revolutionary leaders, from the great Mirabeau to the Vicomte Paul de Barras and Henri Rochefort, Marquis de Lucy, he has lived in exile or under the ban of the law from boyhood until past middle life, brooding over his system for the destruction and the reform of society. When a succession of amiable talkers and of more and more "advanced" theorists had sufficiently prepared the way, and the Germans sent him into Russia that he might act as a dissolvent on her diseased frame, he seized his chance with avidity. With the cold relentlessness of a confirmed doctrinaire he proceeded to apply the rigid abstractions of his creed to the living and feeling men and women of a vast Empire. He, Vladimir Lenin, cost what it might in blood and in tears, would at last realize the true faith and bring in the Marxist millennium. For so great and beneficent an end all means are justified. Lenin no more shrinks from massacre and wholesale executions than did the narrow-minded and embittered Arras attorney, Robespierre, whom the statesmen of Europe mistook for a great man because he had contrived to make himself a dictator. The two revolutionists resemble each other in many respects. The same perverted sincerity, the same decency of manners, and the same financial profligacy amidst general debauchery and corruption belong to both. Lenin is said to be free from the vindictiveness of the other, but he is quite as pitiless. He would send his personal and his political friends to the scaffold with the same ruthlessness, did he think they crossed his path. Like Robespierre, he is reputed a skilful dialectician, but apparently his audiences are not critical; the sample of his skill given by our correspondent is not impressive. The secret of his strength is his evil courage—the courage which does not flinch from any crime or infamy in the pursuit of a single fixed idea. With that quality no exceptional gifts are needed to win power in disorganized societies.

Most of the minor Bolshevik leaders are Jews, and they seem

to be older than is usual with revolutionary chiefs. Our correspondent states that nearly 75 per cent. of the "Commissaries" who have the central control of the movement are Jews, while the Jewish officials of the Soviets are "legion." That there is but a single genuine working man among the chiefs is entirely in accordance with precedent. "L'ouvrier Albert" was a trump card in the Provisional Government of the aristocratic Lamartine in 1848. The rest are "intellectuals" and *bourgeois*. Of course; they always are. Trotsky—whom our correspondent places on a far lower plane than Lenin—is a Jew and a journalist. Zinovieff, alias Apfelbaum, is a Jew and a journalist; Sverdloff is a Jew and a chemist; Kameneff, alias Rosenfeld, is a Jew and a university graduate; Moses Salomonovitch Uritsky, who "made" the elections, is a Jew; Yoffe, Radek, Litvinoff, and many others whose names are known to our readers, are Jews. The terrible history of the Jews in Russia accounts, no doubt, for this remarkable phenomenon. The age of the chiefs—Lenin is forty-nine; Trotsky is forty-two; Zinovieff, the tyrant of Petrograd, is thirty-six; Sverdloff is thirty-four, Bucharin forty, and so on—is harder to account for. Latin revolutionists are much more precocious. In other respects the leaders are common revolutionary types. Trotsky is of the ferocious variety. He loves heroics—so did Collot d' Herbois—and appears to have enjoyed himself, hugely prating about Russia's "honour" at Brest-Litovsk while the Germans were extorting their peace terms. He is blood-thirsty, of course, and he is also malignant, sating his revenge upon his personal enemies. He is something of a dandy, as were some of the chief Terrorists, and it is rumoured that he is no more "pur" than, say, the unfrocked monk Chabot, or "the Alcibiades of the Mountain," Herault de Sechelles. He has great energy, and, if he has not organized victory, he has created the Red Army, such as it is. His cruelty springs from fear, like that of many other tyrants, and probably at heart "he remains a Trotzkist," as Lenin said of him three years ago. Zinovieff and Sverdloff, who is a sort of President of the Republic, are as cruel as Trotsky, but in a different way. He is passionate; their cruelty is of the "reflective, logical" kind, as was the callous Fouche's or the elegant Saint-Just's. Krilenko is, perhaps, the most repulsive figure in our correspondent's gallery of portraits. Appropriately, he holds the office of Fouquier-Tinville. He is the Public Prosecutor, and, while not employed professionally in demanding the death sentence, he inflames the blood lust of the rabble with the homicidal oratory of Marat. Then there are the men of good position and wealth who, for one reason or other, have joined the revolutionists. Lepelletiers and Laffittes are as common on the revolutionary stage as are the Ouvrards and the *haute finance* skulking behind the scenes. They are very usual specimens. So is the "amiable visionary" who radiates mildness and softness, but nevertheless works hand-in-hand with the spoliators and the assassins. Were not all the *Conventionnels* "sensibles"? Did not Robespierre himself guillotine to establish "the reign of virtue" and a new *Salente*? Take them for all in all, the Bolshevik leaders are the kind of men who invariably come to the top in great social convulsions. The abilities of most among them would not raise them above very ordinary positions in settled times, but they are vain and unscrupulous. Their vanity impels them to seize the highest posts: their unscrupulousness tells them how to grasp power: the blood they shed, the crimes they sanction, forbid retreat. For a season they rule with a despotism no autocrat dare exercise, but the season is brief.

WHAT IS YOUR CITY DOING?

IN the MANUFACTURERS RECORD of last week there appeared a story from Little Rock, Ark., emphasizing in a striking manner the expansive building program now under way in that city and, showing how the aggressive campaign waged by the Board of Commerce was resulting in the establishment of many new industries there and in the surrounding territory.

This is the sort of good news and information that the MANUFACTURERS RECORD likes to hear about. And our readers like it. It's a good tonic for the South and for the country. We believe it to be typical of what is going on in many Southern communities, and we invite other towns and cities to match this summary of work under way in Little Rock by sending us a report of their own activities present and contemplated.

FULL SPEED AHEAD FOR CONSTRUCTION WORK.

NO one can read the constantly lengthening statement of new enterprises of every variety of construction work of every character appearing from week to week in the MANUFACTURERS RECORD without being tremendously impressed by the rapidity with which the South and Southwest are turning from war conditions to the most progressive activities of peace.

Take, for instance, one little community in Florida from which this is written, and there are at the present time more contracts for buildings than the aggregate work done during the last three or four years, and every architect's office is crowded with plans for additional work. Street paving will be put under way as soon as the details of bond issues can be carried out, far in excess of all street and road work done in that community in the last five years.

These are but typical illustrations of what is taking place throughout the South and Southwest. The town that is not stirring with new life is an anomaly.

The spirit of optimism, the spirit of construction activity, is broad in the land. State Legislatures are rapidly meeting the requirements of the Government in regard to co-operation in the enormous road-building campaign made feasible by Federal legislation. Towns and counties are vying with each other in street and highway work.

Men who have been holding off for the last four or five years from the building of homes and churches and schools are eager now to get their work under contract, for the wise man realizes that it is unwise to wait for lower wages or lower materials. There are enough broad-minded men of go-ahead proclivities to take up the entire slack in construction work, and those who wait are likely to get badly left, while the active men who see the opportunity will get the benefit of the situation.

It could not have been expected by thoughtful men that immediately upon the signing of the armistice people could rush into building work. It would naturally take months of careful study of architects' and engineers' plans before actual construction work could be got under way. In the matter of municipal and highway improvements, it was necessary to arrange for popular votes in order to issue securities and then these had to be sold and bids had to be advertised for contract work.

That in so short a time so vast an amount of work is being got under way is the highest proof that could be given that we are entering upon a period of great building expansion. This means not only the building of dwellings and municipal structures, but the building of churches (and no church has a right to hesitate in the hope that it will secure lower wages or lower materials), and the building of highways and kindred work. These things will soon start the wheels of industry revolving at full speed.

The iron and steel trade, it is true, has been halted, largely by the action of the Railroad Administration, but even unwise action such as that cannot much longer hold back an inevitable improvement.

If the Government will simply take its hands off the machinery of trade and throw wide open the throttle, the business interests of the country will take care of the whole situation. We had too much regulation even during the war. Practically all of this regulation should be instantly abandoned and business permitted to adjust itself to new conditions. We venture the assertion that when this is done the prices of many materials will advance by reason of natural conditions, based on the demand and on the world's financial inflation, which of necessity compels prices to be high.

Those who attempt to ignore the natural economic conditions based on world inflation have very little conception of the power of inflation over prices above and beyond all pos-

sible power of individuals or governments to regulate prices. We are facing a situation where the dollar has been tremendously cheapened, and it is the cheapened dollar rather than the higher price of material and labor which we must recognize as the fundamental condition of world affairs.

With this situation fully understood those who have been halting will soon join the procession of active go-ahead construction forces of the country, and then we shall see a revival in trade that will surpass in volume the tremendous output during the war, and in this case all development work will be for the upbuilding of the world rather than for the tearing down and destruction of so much of the world as we had to face for four years.

The South and Southwest are setting the whole country a splendid example of enterprise and optimism and of a determination to go ahead.

THE HUN MUST PAY IN FULL.

EARLY in the war the German hordes swept southward through the iron basins of French Alsace and Lorraine, and for nearly four years this renowned mining area was held and exploited by the invaders. Many of the employes were made captives and compelled to work in the mines under German direction. The international boundary between France and Germany was drawn in 1871, to give the victor of the Franco-Prussian war control of the iron fields, but since that time scientific development, guided by a better understanding of the local geology, exposed for France a greater or reserve at lower horizons than that of Lorraine Annexee. With the return of Alsace and Lorraine to the mother land, France will become the dominant factor in the future steel industry of Europe. During the German occupation the iron mines were not intensively exploited because of the necessity of recruiting into the Teuton army every able-bodied man and on account of the large accumulation of war minerals in preparation for the war. The actual physical damage to the iron mines is relatively small when compared with the destruction of the coal fields of Northern France, which was as reprehensible as it was complete. Only in a few cases, where pillars have been robbed, is there any collapse of underground workings in the iron mines, but the equipment, both surface and underground, has been misused, and where ore has been mined the lack of development will defer realization of capital until the exploratory work is sufficiently advanced to admit of daily output approximating pre-war conditions. The mines are not seriously crippled, but what of the steel plants in which the iron ores are smelted? No such atrocity was ever perpetrated against the industrial life of any country. Magnificent plants, comparing favorably with anything we have in the United States, are now but a tangled, twisted mass of structural steel and broken stone. The wilful demolition was scientifically planned and systematically carried out. This after the removal of all such mechanical and electrical power units as could be used in Germany. The maliciousness and efficiency with which this crime against French industry was conducted is almost unbelievable.

"Going eastward in the coal districts, the frightfulness is more and more appalling, for the hate of the Hun left its mark on the mines during his forced retreat. The coal measures are overlain by water-bearing strata, necessitating special methods of shaft sinking and support to keep the mines dry. The steel lining of the shafts was dynamited, letting in the quick-sands and flooding the underground workings for many miles. In the entire Pas de Calais region it is estimated that 120,000,000 cubic meters of water must be pumped before mining operations are resumed. Having flooded the mines, the headframes and surface equipment were systematically dynamited, the twisted debris in many cases filling up the demolished shafts. It will probably be five years before this coal district can be rehabilitated and twelve to fifteen years before it gets back to normal pre-war output."

This is part of the preliminary report made by Frank H. Probert, a consulting engineer of the Bureau of Mines, who was a member of the special American Commission sent abroad for the purpose of getting first-hand information about the devastated regions in France. It shows that the reports previously received from other sources were in no way exaggerated. It should not surprise any reader of the MANUFACTURERS RECORD. It simply confirms what has been said in these columns over and over again in the effort to make

this country see that the devilishness of the Hun is equaled only by the activities of hell itself. In fact, it is proper to consider such acts of the Germans as hell's own achievements. Only the inspiration of the foul fiend himself could devise such inhuman and hitherto inconceivable acts of devastation, ruination and destruction.

And yet there are thousands, yes, hundreds of thousands, of men and women in this country and some newspapers who are afraid that the Allies will be too hard on Germany. That her spirit will be crushed never to rise again. That in some unknown way a great injustice will be done that country which planned with incredible skill to cripple the French nation beyond possibility of recovery, either in industry or in spirit. And these people would have Germany let off with the payment of only a nominal sum as an indemnity.

It would be well, indeed, for such as these to consider what would be the position of this country if Germany had been successful in her larger aims. Think for a moment whether the arrogant German, in his hour of victory, would not have made this country and every man and woman and child in it pay to the uttermost farthing and to the last drop of blood.

"I am afraid the Peace Conference is going to let the boches off too easily," is the statement of Prof. Louis Dubois, deputy for the department of the Seine. "One has to see the destruction with one's own eyes. Much has been cleaned up already. With devilish ingenuity the Germans made a specialty of destroying the essential things. They even had a machine specially devised to destroy railway points. General Gassouin, who commands the northern section, told me that it will take two years before the railway system is in proper working order again.

"The pits of the coal-mining district are flooded in places. One or two may be worked partly in six to eight months, but it will be five or six years before the mines are in proper working condition again. Where are we to find the miners? The country around is razed and devastated to a degree of which people have not the faintest idea. There is not a house left standing in Lens."

Professor Dubois said he knew of cases where the Germans had approached the original owners of metal manufacturing and sugar refining machinery and offered to sell back to them their own property which had been stolen from them.

It was Germany's plan to take advantage to the fullest extent of the poverty and destruction of France. All her carefully planned acts of devastation were definitely intended to work to the great profit of the German people and make their industrial position secure. It is inconceivable, therefore, that the Allies in this day of victory over the Hun should allow their eyes to be blinded, their sense of justice to be set at naught, their labor and treasure of the past four years to go for nothing and permit Germany through cunning and devious ways to gain at the peace table what she lost in the war.

The world should be made to see and know that the American nation can distinguish between sentiment and sentimentalism, between stern justice and misplaced idealism, between sincerity and chicanery, between right and wrong.

The bill against Germany is a large one. Let the Hun pay and pay and pay.

FAVORABLE OUTLOOK REPORTED FOR AMERICAN SHIPPING.

SHIPBUILDERS have in sight work enough to keep them running at capacity for several years, in the opinion of Marine Engineering of New York. In the course of a careful study made by H. L. Aldrich of that publication some interesting and significant facts are presented.

It will be necessary to build about 30,000,000 dead-weight tons of vessels to supply the ships required for carrying the

commerce of the world. Vessels were run to their utmost capacity during the war, and, speaking generally, are now ready for the scrap heap.

In 1914 capital invested in shipyards was estimated at \$150,000,000. Shipping Board officials estimated the 1919 investment at over \$1,000,000,000. It is not conceivable that these vast yards will be scrapped or changed into other branches of engineering in view of the large sums involved.

In 1914 the estimated investment in vessels of all kinds was \$600,000,000. To this figure the Emergency Fleet Corporation has added a sum over \$3,000,000,000.

Confidence in the future of the American merchant marine is shown by the investment of many millions by such organizations as the American International Corporation in purchasing ships outright and in securing the controlling interest in large steamship companies.

The investment of over \$4,500,000,000 in shipyards and ships is assurance that America is sure to be a great maritime nation.

MORE PAINT NEEDED.

MR. R. L. MCKELLAR, foreign freight traffic manager of the Southern Railway system, writing from Washington on April 2 to the MANUFACTURERS RECORD, said:

"The following from the title page of your issue of March 27 impresses me as being excellent and timely advice:

"Every labor organization can now do the biggest work that it ever did in human history for laboring men in other countries. If labor will be broadminded and urge laboring men everywhere to enter enthusiastically and whole-souledly into co-operative work, into the avoidance of strikes and unwise agitation, it will be possible for them to help set the wheels in motion which will pour out a stream of prosperity to enrich all the earth and to create employment for laboring men everywhere.

"Business men have a tremendous responsibility to lead out in this work to start world prosperity."

"You also give some excellent advice to the South in editorial on page 71 in pointing out the great value of publicity and painting up. The South needs something like a thousand carloads of paint; paint judiciously distributed and well applied."

We fully agree with Mr. McKellar that the South needs a thousand carloads of paint. Indeed, we feel that that amount would not begin to meet the South's needs.

Paint is not only a preserver of wood, but a beautifier. The unpainted house is an eyesore, but it is more than that. It is either a proof of such poverty that the owner of the house cannot afford to paint it or of a slovenly disregard of looks or of an utter failure to recognize that paint, through the preservation of wood, is a great help toward economy.

Wherever an unpainted house is to be found it must inevitably indicate one of these three things. If it is a matter of poverty which prevents the use of paint, then the owner of that house is to be pitied and not condemned. If, however, the lack of paint is due to a lack of business judgment and a disregard of the preservation of the building, or if it is due to a slovenly disregard of the looks of the dwelling in which a man compels his family to be housed, the community itself ought to find some way to create such a spirit of pride and such a spirit of thrift as to bring about the attractive painting of every house in every community where poverty does not make this impossible. Few things more greatly mar the attractiveness of an entire community than the unpainted house, and few things indicate a greater lack of thrift than the house that is going to pieces for the lack of paint.

We Wouldn't Like the Job; Neither Would the Huns.

LAWTON REFINING CO., Lawton, Okla.—We are inclined to feel sorry that the writer of your front cover editorials is not in position to direct the Peace Conference now in session, more especially that portion of it having reference to what the Huns shall or shall not have in a final settlement.

What Will the World Gain If America's Independence Is Destroyed?

By P. H. WHALEY.

Washington, D. C., May 7.

When asked what would happen if Canada, with the League of Nations in force, should desire to break away from England and become fully independent, would America, for instance, be compelled under the League constitution to fight against Canada and prevent her from achieving her independence, Senator Borah replied that the question might properly be called debatable, but that in his opinion there would be no question about the authority of the League to demand such action on the part of the United States.

"There is no democracy in the League," said the Senator. "A subject nation may want its independence and the United States might sympathize with it, but there is no provision by which the principle of self-determination could be applied. There is ample power and ample authority under the League constitution for any executive council to crush out any movement for freedom or independence on the part of any subject nation or any small nation."

More careful analysis of the proposed amended constitution was possible during the past week, and the following points are held here to be incontrovertible:

In spite of popular belief to the contrary, the United States does not have a vote on an issue to which it is itself a party. The so-called unanimity which is required is the unanimity of the members of the League other than those directly involved in a dispute.

The right of withdrawal from the League is illusory. Withdrawal is possible only when a member has fulfilled all obligations. If any one other member concluded that the United States had not fulfilled all obligations, that one nation would have a veto right on the request of the United States for permission to withdraw.

The Monroe Doctrine is reduced to the status of a "regional undertaking." Press comment in London distinctly shows that the interpretation of diplomats there is that if American enforcement of the Monroe Doctrine seemed to threaten the peace of the world the action of the United States and the Monroe Doctrine would be subject to review and decision by the executive council. If, in fact, Brazil and the United States both happened to be involved, a decision as to the Monroe Doctrine would be reached without any American commonwealth having a vote on it.

There is no provision for the voice of the people to be heard in any respect concerning the issue of peace or war. Presumably, for instance, the American representative in the executive council will be named by the President. The President might have been repudiated in the elections by an overwhelming vote, yet his representative on the League could vote in utter defiance of the American electorate.

The executive council is given the right to declare that the United States is at war and to recommend what military action it will take. The United States will be compelled to take the action recommended or to appear as a violator of its moral and contractual obligations. Failure to comply would deprive it of the right to withdraw from the League.

There are no checks and balances in the instrument called the constitution. The only written constitution which has survived the test of experience is the American Constitution. It has a most careful adjustment of balances, and it represented the work of many of the most brilliant men that ever lived, extending over a term of years. The League constitution has been written off-hand, without any checks or balances, and there is in it every element of despotism against which such men as Jefferson and his co-workers insisted on taking the most extraordinary precautions.

The League secures to England forever complete domination of the seas and the much-heralded "freedom of the seas" is entirely abandoned. On the other hand, the United States is virtually precluded from taking necessary precautions against another war.

American international policy is transferred in its making from Washington to Geneva, and no human being in America will know what the requirements of any situation are until word comes from Geneva. There is under the League constitution no possible agency by which the forces of democracy can be made effective. Every reliance is placed on the good faith, the ability and shrewdness of the councilors, but if in the course of time and the play of politics they should become autocratic in tendency, there is no method provided for holding them in check. There is handed over to them such authority as no human tribunal ever before possessed.

It is not a League of Nations, or a League of Peoples, but a League of Diplomats. It is a "League of the same breed of men and the same official caste which has brought sorrow and suffering to Europe for centuries," and which now has accomplished indirectly what never could have been accomplished directly, namely, control over the resources and powers of the United States.

It is admitted that this is "a benevolent despotism," which many consider the best form of government, the only difficulty being that it has never been possible to assure the permanence of the benevolence.

But this fatal break with American traditions, this rushing into entanglements against which the forefathers warned the nation, this hysterical plan to put on America's shoulders the burden of centuries of misrule in Europe, the misrule from which the founders of the United States fled, has been nurtured with such misrepresentations, with the vast powers of Governmental publicity and prestige behind it; and so subtle have been the arguments employed to bring the masses into support of it that the belief in Washington today is that it will be sanctioned by the Senate.

"The most momentous action the nation was every asked to take is being forced down the throats of the Senate by a demagogic of unexampled cunning, with indecent haste and with a want of regard for national interests which is positively appalling," said one Senator. "Would it not be worth while for the American people to consider that this momentous move is proposed not on the ground that it is necessary for the wellbeing of America, but solely on the ground that it will be good for other nations? Is there no way to wake and inform them in time to assure the proper protection of their interests?"

Relief Seen for Cotton Oil Situation.

Washington, D. C., May 7—[Special.]—The Cotton Section of the Food Administration, which is the only division of the Food Administration still in active existence, today took action to relieve the stagnant conditions which have existed in the cottonseed and cottonseed-oil markets. The action follows extended conferences with manufacturers held here last week.

The action takes the form of permitting manufacturers of lard substitutes to take a differential of $7\frac{1}{2}$ cents, instead of $5\frac{1}{2}$ cents, over the $17\frac{1}{2}$ cents which they must pay the oil producers. This gives the manufacturers of lard substitutes an additional manufacturing profit of 2 cents, which will be sufficient to encourage production. The statement is freely made that an immediate result will be the prompt movement of cottonseed products from the crushing mills, which means that there will also be an immediate market for seed.

The new ruling, therefore, is expected to afford prompt relief to the agricultural South, where thousands of farmers have been holding their seed in storage owing to their inability to secure a market. It is also stated that heavy shipment of cottonseed oil to Europe and Germany may shortly be expected.

Reports to the Government show that there has been a tremendous movement of seed to the mills during April, and it is stated that the situation, which was very tense, is now well cleared up.

Government at Washington in State of Suspended Animation.

Washington, D. C., May 7—[Special.]—The message from the Chamber of Commerce of the United States to President Wilson urging him to hasten his return and promptly to summon Congress in special session voices the feeling of nine-tenths of the business men of the country. To state that Washington is in a state of paralysis would be but mildly to describe the situation. Mere inertia, governmentally, might not be entirely detrimental to the affairs of the nation, but the absence of the President and virtually the entire responsible Government from the Capital has left affairs in the hands of subordinates and an officialdom which manages to entangle every situation in so much red tape that extrication seems hopeless.

If, in his six years of office, the President has made Congress a mere instrument for registering his will, even more surely has he taken from his executive officers the power of initiative. They dare nothing without his approval. It is a triumph of hope over experience, therefore, to expect decisions of any importance from Washington. The details must first be cabled to Paris, where they are brought to the attention of the President. But the trouble with that is that he is already overburdened with matter connected with foreign affairs and finds it difficult to give time to the consideration of purely domestic matters.

It would require pages to catalogue the disabilities which are hampering business as a result of this stalemate in government. To illustrate, there are the so-called luxury taxes, which went into effect on May 1. It was agreed by Mr. Kitchen, chairman of the House Ways and Means Committee, and Senator Simmons, chairman of the Senate Finance Committee, and by the Conference Committee jointly, that these taxes should not be levied. In order, however, not to delay passage of the revenue bill, the section imposing the taxes was kept in. It was agreed that it would be repealed immediately by joint resolution. It was repealed by the House, but in the Senate there was no time to take action. As a result, the taxes are being levied, although it is well understood that they will be repealed as soon as Congress convenes. Meantime, in setting the machinery to work to make the collections, it is estimated that the cost of collection will virtually equal the amount collected.

There is scarcely a department of the Government which is not hamstrung in some particular through want of legislation. Nor does this take into account the total lack of any reconstruction policy whatever. There is a veritable apotheosis of chaos, so far as after-the-war policy is concerned.

Washington was informed privately several days ago that the new session could be expected by May 20, but other reports indicate that it may be June before Congress convenes. That will give so short a time up to July 1 that Congress will have to spend the entire month of June in enacting the appropriation bills. In other words, it will be impossible even to consider reconstruction legislation until July, although committees may be able to hold hearings earlier. The chances are, therefore, that it will be October before the nation knows what the governmental policies for the readjustment period are to be.

While the United States Employment Service and other agencies, therefore, are plastering the country with publicity designed to secure employment for the unemployed, industry itself, on which all employment depends, is left to shift as best it may, and the period of doubt is lengthened. Fortunately, men of energy, despairing of Government assistance, have gone ahead on their own account, and it may be that readjustment will fairly well have been accomplished before the Government finds time to announce what its own plans are.

West Texas Sulphur Co. to Export from Texas City.

Texas City, Tex., May 3—[Special.]—The Texas Gulf Sulphur Co., which recently placed in operation its new \$4,000,000 sulphur mining plant at Sulphur Hill, six miles east of Matagorda, has entered into a contract for the construction of large storage bins and other facilities with the view to making Texas City the deep-water shipping port for its product. The company is now producing 1200 tons of raw sulphur a day, and this amount will be increased by drilling additional wells. It plans to ship not less than 200,000 tons of raw sulphur a year through this port. Much of this will be exported to South America and Europe.

Awaiting More Light on Government's Shipbuilding Program.

Washington, D. C., May 7—[Special.]—Following cancellation of 2,000,000 tons of steel vessels and 1,500,000 tons of wood ships, Washington is awaiting official notice from the Shipping Board of the stoppage of work on 35 troop transport ships at Hog Island, which will involve the scrapping of steel plates to the value of \$14,000,000.

The steel forms and plates, aggregating more than 200,000 tons, were purchased at an average of \$65 per ton. The plates, it is stated will be useless for shipbuilding purposes when the proposed cancellation is made, as they have been already bent and punched to meet present designs.

The plan to cancel the contracts was recommended by P. A. S. Franklin, chairman of the special committee on ship construction of the Shipping Board. In the view of President Matthew C. Brush of the American International Shipbuilding Corporation, "twenty of the Class B vessels can be cancelled without involving any very substantial loss, but if you go beyond the twenty I think there would be tremendous loss."

On Monday Mr. Hurley took personal charge of the shipbuilding program. As a result of the speech of Mr. Piez in Philadelphia, in which he took issue with the decision to cancel, conferences looking toward a compromise were held, it is said, but the understanding is nevertheless that the Hurley plan will be made operative virtually unchanged.

Mr. Hurley states, however, that it is not his intention to indulge in a ruthless policy of cancellation. This is taken to mean that he will try to meet the cancellations by awarding new contracts to the yards involved. But since it is known that he is insistent on his view that approximately \$150 a ton is an ample price to pay, and since some of the newer yards cannot build profitably at that figure, it is considered extremely doubtful if wide dislocation of industry can be avoided.

The Shipping Board expects to have within another week reports on the various types of vessels needed in the different trade routes throughout the world. These reports will furnish the basis for future plans.

Mr. Hurley and the majority of the practical experts advising him are in favor of a balanced fleet, built according to the requirements of the several trade routes on which they will operate, and so constructed as to assure a minimum cost of operation and a maximum earning power. It is the belief of a group of shipping men that the decline in American shipping was due not only to the ravages of Confederate privateers, but also to the failure of American interests to take prompt advantage of the steel power ship, which England rapidly employed to take the place of wooden vessels. The statement is made that while the construction of many small ships would produce impressive statistics as to American tonnage, the net result finally would be the failure of the entire marine program. The idea, in other words, is to make the American fleet the most modern and best balanced fleet in existence, the belief being that in this way certain disadvantages in operation may be overcome and competition with foreign nations on at least an equal basis be obtained.

But whether the sacrifice involved in proposed cancellations can be justified by the benefits which it is hoped to obtain under the new program is a question on which there is considerable disagreement.

Banking Facilities and Foreign Trade.

"Banking Service for Foreign Trade" is the most recent of a series of publications which the Guaranty Trust Co. of New York is issuing in relation to export trade problems. It describes how American banking connections have pushed out ahead of business until now there are few, if any, trading centers without either an American institution or else a direct correspondent of an American institution, prepared to care for American trade. A map shows in detail the world-wide connections of the company. The extent of its direct relations abroad has enabled the company to build up a foreign trade bureau having credit information on more than 50,000 foreign firms in all parts of the world, besides much other related data, and able to give careful reports as to opportunities for the sale of American products. The booklet contains several pertinent illustrations.

LEAGUE OF NATIONS

[The dominant issue of the world today is the proposed League of Nations. It transcends in importance all other questions and believing that in its present form the League would be inimical to our country, and thus in the end to all civilization, the Manufacturers Record is giving much space to it, and for that reason publishes the following letters.—Editor Manufacturers Record.]

The League of Nations as Viewed by a Leading English Manufacturer.

ARTHUR KITSON, The Kitson Empire Lighting Co. Limited.
Stamford, Lincolnshire, England.

From the limited information that we receive regarding the progress of the "peace" negotiations in Paris, it appears that President Wilson's idealism, together with his autocratic methods, are responsible for these unfortunate delays in the signing of the "peace terms." It would seem almost incredible that after all the lessons that we have learned regarding the treachery, the brutality and the unscrupulousness of the Huns that they should still find a defender in the President of a country that has been so recently at war with them.

There is great danger that President Wilson's determination to have his own way and to carry out his particular policy will throw Europe back into greater turmoil than ever. It is little short of a calamity that Ex-President Roosevelt was not spared and that he was not appointed as the representative of America at this conference. There is little doubt that had he been in office instead of Wilson peace would have been signed at least four months ago.

The plague of Bolshevism would then have been destroyed. France and Belgium would have been restored and Germany would have been crushed so that she would never dare defy the civilized opinion of the world again.

We on this side cannot believe that President Wilson really represents the true feeling of the American people in his attitude towards the Allies and the Huns. It is to the interests of the United States as much as to the interests of Europe that Germany should never again be able to wage a great war, and yet if reports are to be trusted, President Wilson's main concern seems to be to see Germany revived and her industries restored, regardless of its effect on Germany's neighbors.

However, we shall probably know within the next week or two how far rumor is to be credited and whether President Wilson has exercised wisdom or not.

Could the History of the Confederacy Be Duplicated in the League of Nations?

HENRY A. FORSTER, 32 Liberty Street, New York City.

Suppose a committee of the allied conferences or the plenary session thereof amends the proposed covenant or so-called constitution of the League of Nations by adding a reservation of the Monroe Doctrine or of the alleged right of any member State to secede from the League. Such reservation might be as worthless and ineffectual as the like reservation of the alleged right of Virginia, New York and Rhode Island to secede from the Federal Union contained in the respective ratifications of the United States Constitution by those States was held to be during the Civil War. By the sword of war and later by the decision of the Federal Supreme Court, it was decided that, notwithstanding express reservations in their ratifications of the Constitution of the right of those States to secede, the Federal Union was perpetual and indissoluble.

Texas vs. White, 7 Wallace, 700, 722, 725-6.

Virginia's ratification of the Federal Constitution does "declare and make known that the powers granted under the Constitution being derived from the people of the United States may be resumed by them whosoever the same shall be perverted to their injury or oppression."

2 Documentary History of the Constitution of the United States, p. 145.

New York's ratification of the Federal Constitution declares: "That the powers of Government may be reassembled by the people whosoever it shall become necessary to their happiness."

2 Documentary History, pp. 190, 191.

Rhode Island's ratification declares: "That the powers of

Government may be reassembled by the people whosoever it shall become necessary to their happiness."

2 Documentary History, p. 311.

The Executive Council of the League of Nations is an autocracy like the Holy Alliance without any Supreme Court or any other council or legislative body to hold it in check. It is the sole judge of its own powers. It is a union of the executive, legislative and judiciary merged into one body. If its decision, however erroneous, is disregarded, an international boycott, embargo or taboo will be followed by an international war in which it is the duty of every member State to support the international war to the utmost of its strength. There is no more reason to believe that in an emergency the Monroe Doctrine would be respected because reserved or the reserved right to secede peacefully allowed, than was the like reserved right in the case of Virginia (likewise of New York and Rhode Island) in 1861.

Constructive Policies Receiving Commendation.

W. E. BOLLES, Superintendent Sales Department, Reeds Farms Company, Oldsmar, Fla.

I want to use this opportunity to express my high appreciation of the powerful patriotic campaign which your magazine has maintained. I am especially interested at this time in the open discussion of the proposed "League of Nations," and I have heard many complimentary remarks on your constructive policies.

The Original League of Nations Covenant Has Been Greatly Altered.

J. B. MOORE, Attorney-at-Law, El Dorado, Ark.

Observing the liberality with which you have opened your valuable columns to the free discussion of a proposed league of the nations for the peace of the world, I have concluded it would not be presumptuous in me to offer some suggestions on the same great subject. In the first place, I desire to stress the fact that without exception there appears to exist no real difference of opinion as to the real need of the object sought to be attained from a liberal interpretation of your able editorials and the pungent correspondence appearing weekly in your columns between you and those who oppose the League and President Wilson and those who favor it. All on both sides of the question of a League or no League are manifestly in favor of the one main object in view, the final sheathing of the sword and a permanent peace founded on the eternal principles of right and justice applicable alike to nations and individuals. The only real questions at issue seem to be: First—Is the proposition a practical and feasible conception? Second—if so, then by what method or plan, in harmony with our constitutional form of government and with security to American institutions and ideals, can the priceless boon of permanent peace be so attained? The correct answer to these mooted questions embody the solution of the much-vexed problem and the reconciliation of all divergent views on the subject.

In the heat of the controversy the gist of the argument has been expended in dissecting the inchoate suggestions and propositions of the proponents of the League without the offer of any suggestions looking to the development and perfection of the plans proposed.

The one central idea, in the attainment of which all are agreed, seems to have been lost sight of, and the quicksands and dangers which lie across our path in entering a league based on moral suasion only are foreshadowed and held up before our gaze to frighten and deter us from its consideration and perfection into that concrete form which, if possible, shall give us equally with all the other nations of the earth perfect security and safety from the evils of future wars. I am forced to concede, however, that a League based on moral suasion is nothing more nor less than a political international organization, involving entangling alliances and fraught with many dangers, both seen and unseen,

to the future of our republic, which must sooner or later disintegrate and fall to pieces and precipitate a universal war more horrible and destructive than that which has so recently drenched Europe in blood and sent a wail of woe and suffering throughout the world.

If political organizations composed of homogeneous peoples have not escaped disintegrating ruptures, as has been witnessed in the politics of our own country and throughout the world, is it possible to conceive that a political international organization of heterogeneous peoples of antitypical interests, thoughts and ideals, can, for any reasonable length of time escape disintegration while possessing the fragility of the potter's half-baked clay?

It appears, however, that there exist basic principles which, if incorporated in the constitution of a League of Nations, would eliminate all political transparency and give structural permanency and political security to each nation subscribing to its principles in keeping with the will and ideals of its peoples and guarantee to them safety and freedom from all future international wars, and should afford to them as perfect peace as may be found in the best civil forms of Christian government existing upon the earth. They may be outlined as follows, to wit: First—A Common Council of the League of the Nations vested only with appellate jurisdiction and control of an international constitutional system of the Federation of the Nations. Second—Disarmament, in a militarized sense, on both land and sea of each and all its members. Third—The organization, by free contribution from the members of the League, of an adequate International Police Navy sufficiently powerful to cope with and subdue any possible warlike situation which may arise among the nations, whether within or without its membership. And fourth—A tribunal or court vested with jurisdiction and power to bring before it the heads of the executive departments of any or all governments involved in bellicose disputes, and with original jurisdiction to hear, adjudicate and determine all such disputes and quarrels as cannot be settled otherwise than by war, with full authority to enforce obedience to its mandates, judgments and decrees through its judicial orders directed to said International Navy, which shall be and remain under the control and direction of said tribunal in the exercise of its policing duties and in its capacity as the high sheriff of said courts; provided, however, appeals may be taken by either party-nation from all final orders, judgments and decrees of said tribunal or court to the Common Council of the nations, whose decision shall be final. The rest are only detail matters to be worked out by competent juridical and constructive experts.

In other words, force, lodged in and emanating from constitutional authority, should be substituted for moral suasion, and no nation, whether within or without said League, should be permitted to declare and wage war with any other nation or government, under the penalties to be prescribed by the League and enforced by said International Navy in obedience to the orders and directions of said court or of the Common Council of said League.

Such a League so based with its superstructure formed and moulded of the best materials to be culled from the most enlightened thought and righteous systems of civil government as may be applicable and suited to the great end to be achieved, the prevention of international wars and the guaranty of world peace, while it may not be the paragon of perfection, seems to the writer to be its nearest approach as constituting the transformation of the nations into one mighty constitutional federation entered into solely for the security of international peace, exemplifying the highest type and best form of just and righteous civil government, whose constituted strength and power would be absolute and invincible against any and all belligerent nations, who should seek to break the righteous international equilibrium and peace of the world.

Such a League seems to be both practical and feasible, and if so, in it lies the hope of the peoples of the earth, and I am persuaded that President Wilson realizes the vital importance of such a League, and that he will before the final adoption of the constitution of the League insist on having incorporated in it said basic principles, without either of which, it appears, there can be no hope of any except a temporary peace, soon to be followed in succession by a world war in deed and in truth, the probable destruction and horrors of which staggers the imagination to conceive or to describe.

I cannot, therefore, believe that President Wilson and his

American associates and counsellors at the Peace Conference have overlooked these essential basic elements, and I have an abiding faith that if he shall finally fail in securing their adoption into the constitution of the proposed League he and his American associates, after peace has been declared, will respectfully withdraw from the League conference and return home and quietly begin preparations for the next mighty naval and aeronautic conflict which will probably soon enthral and convulse the earth. It should be understood that President Wilson is up against a most delicate and difficult proposition, and cannot drive, but must persuade the aristocratic and martial rulers of the old world to the advanced American pacific and just viewpoint of thinking and acting; and it is but fair and just to him and the great cause he represents to render him all the assistance within our power by the tender of such friendly suggestions and plans as may appear to us of value and importance in escaping the many quicksands and portentous evils couched in an ill-advised constitutional program, and then patiently await results that we may at the proper time act advisedly and justly in our approval or condemnation of his finally tendered program.

[Mr. Moore seems to overlook the fact that President Wilson took the ground that the original covenant as first submitted could not be changed, and it was largely because of that fact that immediate and tremendous opposition developed in America.—Editor MANUFACTURERS RECORD.]

For Soldiers With Jobs Awaiting Them Applications for Discharge Should Be Sent to Colonel Woods.

Washington, D. C., May 7—[Special.]—In order to determine just what are the practical workings of the various employment agencies under Government control, and also to obtain the help required, a prominent Southern manufacturer gave his representative the following inquiry, with instructions to get an answer:

"Has any action been taken by the Government or others through local chambers of commerce and a central bureau to tabulate weekly or monthly those merchants or industrial plants who have positions to fill, and similar schedules of the names of returned soldiers who are in need of work, with positions they are competent to accept?"

An extended inquiry revealed that the answer was "No."

It was stated at the offices of the United States Employment Service that possibly an exchange of the sort mentioned might be arranged later, and it was intimated that in some localities, notably in New York city, there was some such arrangement in operation.

Excellent work in allocating returned soldiers is being done by the department under Colonel Woods, who was particularly assigned to this duty. He operates in conjunction with the Councils of Nations Defense in the several States, and while his organization is still an infant, it promises real results. It is considering and doubtless will establish some sort of exchange along the lines of the question submitted above by the manufacturer.

Although it was stated some time ago to be the policy of the War Department to release promptly men who had jobs awaiting them, it appears that Colonel Woods' agency is the only part of the War Department which is acting in accordance with the policy. Where red tape is thickest, inquirers are told that the War Department never had any such policy, and if it did have, it applied only to those offered jobs in essential industries.

Just what is an essential industry, now that the war is over, is not clear, but some of the camp commanders have held that virtually nothing is essential, or so essential as keeping the men in camp.

It is stated that one packing-house has places open for 1500 of its men now in the service, but cannot get them released. Daily applicants for the release of drafted men are filed with the War Department, where good jobs are offered the soldiers, but refusals are quite as general as approvals.

As a matter of getting results, it is advisable for employers who are holding places open for old employees and want them back to ignore the usual routine and apply directly to Colonel Woods, stating the circumstances fully. His office has a way of cutting the red tape and securing results.

American Business Pledges Active Co-operation in Settling Readjustment Problems

By A. C. BOUGHTON.

St. Louis, Mo., May 2.

It was a convention which expressed the true American spirit of the delegates by its consideration of business and economic problems which this country is forced to face by reason of the war.

At the beginning of the seventh annual meeting of the Chamber of Commerce of the United States, held in St. Louis from April 28 to May 1, President Harry A. Wheeler in his annual address referred to the high call that had come to business at a time of national stress and the faithful service of business men in considering and bringing about solutions of the perplexing problems that were created by the war and other problems following our transition from war to peace, and he said: "We must be prepared to co-operate with the Government in whatever action may be necessary to carry our readjustments through with a minimum of loss and inconvenience, and with the greatest possible dispatch."

He also said: "After six months since the signing of the armistice we still stand upon the threshold of the period of readjustment, awaiting the completion of the Paris conference, which alone can point the way to the resumption of normal conditions, the social and economical problems which we should be considering remain practically untouched." And Mr. Wheeler suggested that this country could not much longer spare our chief executive to await the unraveling of European conditions while we at home drift with neither executive or legislative attention to fundamental matters of readjustment.

Further in his address Mr. Wheeler spoke of the necessity of business men taking up the Victory Loan, even though it might be necessary to some extent to pledge the future, and he insisted that there must be no retrenchment now in the buying of ordinary commodities, for otherwise labor would be out of employment, capital would be eaten up by investment in unprofitable things, bonds could not be bought and taxes could not be paid. He also cautioned manufacturers against the thought expressed in some quarters that the high profits of the war period could be retained, though he added that capital invested is entitled to a fair return, which return is always demonstrable, while if a larger sum than a fair profit was realized it should be applied to the reduction of prices as a first step to restore normal conditions. "If capital is taking an abnormal profit out of business in this post-war period, labor has an equal right to demand an abnormal wage, and the public will be the sufferer. The public has no right to demand service at a price lower than that which will pay the skilled worker and reward the capital invested in the enterprise."

On the subject of Government control he said that the country is further away today from that principle than it was a decade ago, though there is a strong tendency to increase public regulation and supervision. If this tendency be recognized and co-operated with, said Mr. Wheeler, intelligent and constructive regulation will follow, whereas opposition may lead to increasingly drastic control. He said further: "It is my belief that more general regulation of all commercial service is in keeping with the readjustments that are in progress, and that this will not be limited to public service corporations, but will extend to industrial enterprises as well. This is not necessarily contrary to the interests regulated, for it can be insisted that supervision and regulation in the public interests shall be for all the public, and must consider the constructive requirements of the interests regulated quite as much as the public which those interests serve."

The group meetings covered industrial production, domestic distribution, both wholesale and retail, foreign trade, transportation by land and sea, public utilities, highways and waterways. At the general sessions Hon. Carter Glass, Secretary of the Treasury, made an address in behalf of the Victory Loan, and in connection with it took time to refer to the successful operation of the Federal Reserve Banks. Julius H. Barnes spoke on the Government control of Wheat. Maurice Casenave spoke on French relations. Hon. William C. Redfield, Secretary of Com-

merce, spoke on commerce. Edward N. Hurley, chairman United States Shipping Board, spoke on merchant marine. Homer L. Ferguson spoke on shipbuilding, and the subject of transportation was dealt with by Walker D. Hines, Director-General of Railroads; Senator Albert B. Cummins and Samuel Rea.

In his address Mr. Hurley said that the war had developed many new shipyard managers and many thousands of shipyard workers, and that these efficient men would never allow America to fall behind any other nations in building high-class ships. He said that shipyard labor had increased in efficiency from 30 to 40 per cent. since the signing of the armistice, and that while wages are higher in this country than in foreign shipyards, the real question involved was not one of wages so much as it was one of the amount of work produced by the men and the efficiency of the management. He quoted figures to show the difference of cost in the production of vessels in 1916 and now, and he presented a table showing the difference in wages paid to American seamen and those of other countries. He said that the country has today an unusual opportunity to establish a merchant marine on a solid footing and he believed that it was perfectly possible for America to build ships that would compete successfully with those of other nations. He also believed that Congress would pass such legislation as would help to secure a permanent and efficient merchant marine.

Mr. Ferguson, speaking from the viewpoint of a practical shipbuilder, pointed out the problems that confront the producer of fabricated ships. He spoke of a difference in wages paid to ship riveters in one foreign country and in this country; he said that a United States battleship had to be insured abroad, because that is the only market that will carry insurance, and that if a fire occurred on the battleship it was a foreigner who went aboard and told what to do to repair the damage. Then he asked why this country would have to go abroad for the underwriting of American ships and American cargoes, and suggested that the United States Government should use its credit for this business. He believed that the United States Government should lend its money on proper security at a low rate of interest to shipbuilders to encourage this industry, and he suggested that the members of the Chamber of Commerce insist that Congress study the question of shipbuilding, adding that if this country were to have a merchant marine it would be because the sentiment for it would come from the hearts of the American people, chiefly those of the middle West.

Mr. Hines, speaking on the subject of railroads, said that, in his judgment, the best interests of the country would be promoted by the returns of the railroads to private management, but inasmuch as the Government is in effect a partner, he believed that the Government should be represented on the board of directors. Senator Cummins said that he believed many of the railroads should be consolidated under the direction of the Government, with Government guarantees of a return upon the capital invested, while Mr. Rea said that his understanding was that a Government control with a Government guarantee was substantially Government ownership.

At one of the general sessions the question of labor and of wages was touched upon and in the informal discussion which followed a marked divergence of opinion was presented; one delegate suggested that Bolshevism would be invited in this country if wages were reduced before living expenses, while another said that it was a perfectly good economic law that always following an ascending scale of prices wages showed an increase, while on the other hand a reduction in wages always preceded reductions in living costs.

A fair and impartial presentation of the League of Nations was made by Dr. Charles Cheney Hyde, formerly of the Northwestern University. He detailed the necessary regulations for admission to the League, mentioned the express exception of the Monroe Doctrine to its workings, spoke of the functions of the advisory council and mentioned the various powers of the League touching labor, immigration and other details. The subject was presented for information, and the speaker did not attempt to

reach definite conclusions as to the practicability of the League with respect to the United States.

The resolutions committee reported at the closing session, recommending liberal subscriptions to the Victory Loan; a continuation of re-employment of soldiers, sailors and marines in the community where they were employed on entering the service; that the President upon his return from abroad shall immediately assemble Congress in extraordinary session to formulate legislation necessary to take care of the problems of readjustment and to safeguard our social and business structure; that our Government refrain from entering any of the fields of transportation, communication, industry and commerce or any phase of business where it can be successfully undertaken and conducted by private enterprise; that encouragement and support should be given to all measures that will facilitate and enlarge American trade with other countries, extend American banking and insurance to accompany and supplement the foreign enterprises of American commerce and provide adequate cable and wireless facilities; that the United States should enunciate and enforce a firm policy for the protection of American citizens and legitimate American enterprises and investments in foreign lands; that the Federal Government, especially the Railroad Administration and the Treasury Department, as well as State, county and municipal authorities, should proceed with public work wherever possible; that street and interurban railways should be placed upon a basis which will insure their efficient service; that the Government should promptly return to their respective owners the telegraph and telephone companies now being operated by the Government, and that consolidation of companies or joint utilization of facilities should be permitted where they may be found of economic advantage and in the public interest; that Congress should make substantial appropriations for the construction and maintenance of a national highway system, and that expenditures should be permitted only for highways of a permanent type with thorough drainage, substantial foundation, sufficient width and a capacity for traffic which will be reasonably adequate for future needs; that river improvement projects already authorized be speedily completed and that Congress provide for a comprehensive system of waterways with co-ordination of the services of waterways and railways, and that adequate terminals be provided; that Congress is urged to enact such legislation as will develop the water-powers of the country; that Congress should authorize and the President appoint a commission to suggest improvements in the administrative organization and methods of the Government through the medium of a national budget; that an amendment to the Constitution be provided whereby the President may approve or disapprove any separate items or provisions in any appropriation bill; that the Chamber of Commerce of the United States should be reorganized to assure representation of every division of commerce and industry. (This was recommended in President Wheeler's address. He recommended that the general character of the Chamber could be changed from general to divisional work and that the various divisions be Industrial Production, Domestic Distribution, wholesale and retail, Foreign Commerce, including exports and imports, Transportation and Communication, Finance, Insurance and possibly City Development); that a permanent and suitable building be procured in Washington for the occupancy of the Chamber as national headquarters, and that the board of directors take all necessary steps to this end; that consideration be given to the revision of all Federal laws dealing with business conditions, to the end that by proper readjustment of their provisions and of the functions of Federal agencies industry and commerce in United States may clearly know at all times their powers, rights, limitations and obligations.

The convention elected 12 directors in the place of those whose terms had expired, and then adjourned.

It was a largely attended and thoroughly representative meeting, indicating in its serious consideration of the questions before it that American business men are as thoroughly patriotic in matters of the readjustment period as they were to all questions involved in the successful prosecution of the war.

American Iron and Steel Institute Meeting.

The Fifteenth General Meeting of the American Iron and Steel Institute will be held in the Hotel Pennsylvania, New York, on Friday, May 23. On Friday there will be three sessions, forenoon, afternoon and evening, the forenoon session beginning at

10 o'clock. Saturday will be devoted to seeing New York and vicinity.

The secretary's office, on the second floor, will be opened on Friday morning. Members are requested to notify the secretary of the Institute as soon as possible as to their intentions about attending the meeting.

Industrial Activities in the South.

Since January 1 a total of 15,646 brief statements relative to industrial developments, erection of buildings, financial and railroad operations in the South, have been published in the Construction Department of the MANUFACTURERS RECORD and its Daily Bulletin. The totals present an increase of 1449 for April of 1919 as compared to April of 1918 and an increase of 1323 for January, February, March and April of 1919 as compared to those four months in the preceding year.

Of this number, 11,240 were published during January, February and March, and these have been detailed in previous monthly statements. The accompanying table presents the items for April, also the totals for the four months of January, February, March and April.

Industrial Developments

	Totals for April	Totals for 4 mos., Jan., Feb., and Apr.
Airplane Plants, Stations, etc.	3	13
Bridges, Culverts, Viaducts,	63	251
Canning and Packing Plants	31	104
Clayworking Plants	1	37
Coal Mines and Coke Ovens	41	182
Concrete and Cement Plants	9	11
Cotton Compresses and Gins	27	69
Cottonseed-oil Mills	6	23
Drainage Systems	11	87
Electric Plants	51	214
Fertilizer Factories	13	41
Flour, Feed and Meal Mills	11	66
Foundry and Machine Plants	34	131
Gas and Oil Enterprises	149	547
Hydro-electric Plants	9	18
Ice and Cold-storage Plants	219	109
Iron and Steel Plants	3	10
Irrigation Systems	1	11
Land Developments	18	82
Lumber Manufacturing	53	200
Metal-working Plants	12	35
Mining	35	94
Miscellaneous Construction	32	161
Miscellaneous Enterprises	81	310
Miscellaneous Factories	177	570
Motor Cars, Garages, Tires, etc.	118	510
Railway Shops, Terminals, Roundhouses, etc.	1	9
Road and Street Work	491	1,467
Sewer Construction	46	175
Shipbuilding Plants	4	28
Telephone Systems	10	32
Textile Mills	29	97
Water-works	11	278
Woodworking Plants	38	133
Totals.....	1,904	6,106

Buildings

Apartment-houses	93	263
Association and Fraternal	49	144
Bank and Office	87	335
Churches	99	350
City and County	37	252
Courthouses	17	56
Dwellings	272	967
Government and State	29	118
Hospitals, Sanitariums, etc.	46	156
Hotels	71	178
Miscellaneous	36	152
Railway Stations, Sheds, etc.	11	55
Schools	198	577
Stores	178	600
Theaters	30	109
Warehouses	92	279
Totals.....	1,556	4,521

Railroad Construction

Railways	19	78
Street Railways	2	12

Totals.....	21	90
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Financial

Corporations	117	384
New Securities	542	1,631

Totals.....	659	2,015
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Machinery Wanted

Machinery, Proposals and Supplies Wanted	874	3,278
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Fire Damage

Fire Damage, etc.	116	642
Totals.....	4,820	15,646

Sugar Refinery at Savannah Now in Full Swing

MILLION POUNDS A DAY THE FULL CAPACITY MELT—ONLY REFINERY SOUTH BETWEEN PHILADELPHIA AND NEW ORLEANS—IMPORTANT PART PLAYED IN INDUSTRIAL DEVELOPMENT AND COMMERCE OF PORT.

[Special Correspondence Manufacturers Record.]

Savannah, Ga., May 2.

When the New York banking-house of Imbrie & Co. a few years ago bought the Port Wentworth tract as port terminals for the Savannah & Atlanta Railroad, in which they were interested, the tract contained sites and water frontage for numerous industrial plants, but there was only one plant upon it, a lumber mill.

The superintendent of the mill saw the great waste in timber unfit for milling, and his study of the problem led to the establishment of a pulp mill nearby. Paper pulp is manufactured from the well-nigh inexhaustible supply of pine timber in the vicinity. Southern pine contains a long fiber of greater tensile strength and value, it is claimed, than that which comes from Sweden. Importations were greatly reduced during the war, and the pulp mill prospered in a measure which had been unexpected when it was erected.

Not long after these two industries were operating on the Port Wentworth tract, the Oxnard brothers, who had a beet sugar crushing and refining plant in Louisiana, conceived the idea of a cane-sugar refinery between Philadelphia and New Orleans, something which did not exist at the time and for which they saw a great future.

Through the co-operation of Imbrie & Co., a refinery representing an investment of \$3,000,000 was built at Savannah, and started operating in July, 1917. Molasses is a by-product in the refining of sugar, and barrels were needed for the molasses as well as the sugar. This called for the erection of a barrel factory alongside the refinery, representing an initial investment of \$200,000, which last year made 75,000 barrels, valued at \$50,000.

This brief review shows how the establishment of one industry leads to another, and what it sometimes means for a progressive concern to become financially interested in a town. Before Imbrie & Co. became interested in Port Wentworth, on the upper Savannah River, it was well-nigh a barren waste. Now it is humming with industries, among them being the Terry Ship-

building Corporation, which has a fabricating capacity of approximately 4000 tons per month and a dry dock to accommodate ships up to 8000 tons, besides hotels, stores and living quarters.

The capacity for expansion on the Port Wentworth tract is practically unlimited. It is on the line of the new permanent road system soon to be constructed, is reached by the electric rail-

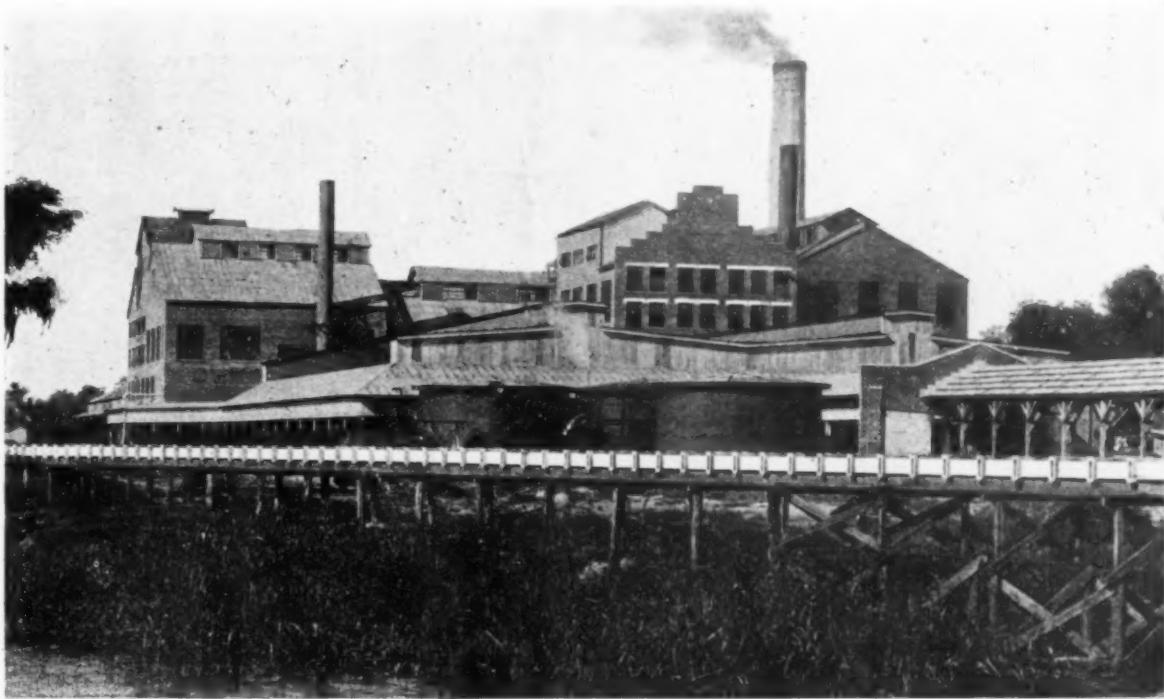


SECTION OF REFINED SUGAR WAREHOUSE, SHOWING METHOD OF STORAGE.

way and by passenger and freight boats on the river. The location is 5½ miles above Savannah, within the port limits.

With the restoration of peace the industrial world girds its loins and starts in upon a period of activity which was interrupted by the war.

This is true of the sugar industry as well as others, for in spite of the essential and highly important manner in which



CLOSE-UP VIEW OF THE SUGAR REFINERY AT SAVANNAH—THE ONLY REFINERY BETWEEN PHILADELPHIA AND NEW ORLEANS.

sugar figured during the war, the production of it suffered many handicaps, and especially was this true of the Savannah sugar refinery.

The Savannah refinery began operations in July, 1917, and did exceptionally well under war conditions, but it was not until after the armistice was signed that it was able to look forward to the prospect of running to capacity, and only now has it swung into its full stride of melting a million pounds of raw sugar each day for six days of the week.

During the war the supply of raw sugars came in spurts, due to the lack of bottoms and to regulations of the Food Administration. Thus this great plant, equipped with the most modern machinery and occupying a location of much strategic trade value, was held down during the year of 1918 to about half of its capacity, the meltings for that period amounting to 180,000,000 pounds of raw sugar, which, though considerable, was less by 50 per cent. than the plant would have been able to produce under normal conditions.

Beginning its activities at a time when conditions were unfavorable and when patience was not the only virtue that had to be exercised to meet the trying exigencies, the aspect of the situation at this time is much more promising, though the sugar business still is under Federal control and the impulse of business initiative and the rewards of trade advantages are yet checked by the leveling processes of central management.

One of the anomalies of the situation growing out of Federal control was the fact that with the sugar refinery at its doors there were periods when the people of Savannah were consuming unrefined sugar, the refinery not being permitted to sell to home merchants.

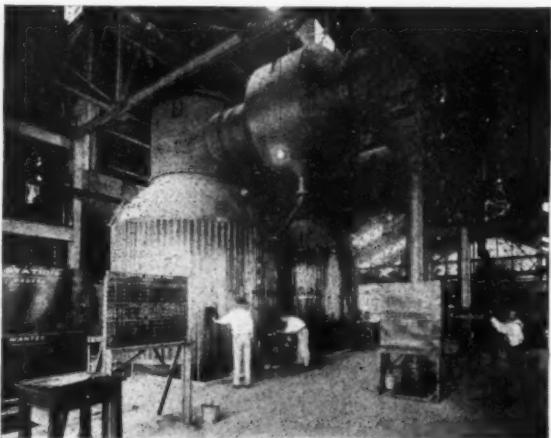
Happily, these times are past, though the Government continues to keep its hand on the sugar market, having purchased the entire 1919 Cuban crop, and all refineries are being operated on the same basis as to first cost, no refinery being permitted to exercise any commercial advantage which might accrue to it through nearness of location to the source of supply or any other advantage that it might possess under individual and independent operation.

The raw sugar is furnished to all refineries at the uniform price of 7.28 cents a pound c. i. f. duty paid, on a basis of 96 per cent. polarization, the allowance for the refined product being 8.82 cents a pound f. o. b. the refinery.

It is impossible for anyone not acquainted with the intricate processes of refining to calculate the cost or arrive at the profits, which are not what they might seem upon the bare statement of these facts. At the very outset the refinery loses 7 pounds of every 100 pounds in the melting process; in other words, 100 pounds of raw sugar turns out only 93 pounds of refined sugar,

the loss going into the by-product of blackstrap and evaporation. Blackstrap, a low grade of molasses, is used in the manufacture of stock feed. Many of the older persons of the South will recall that blackstrap formerly was used to a considerable extent as a portion of the plantation rations. It has both an appetizing odor and appearance as it flows from the virgin sugar at the refinery.

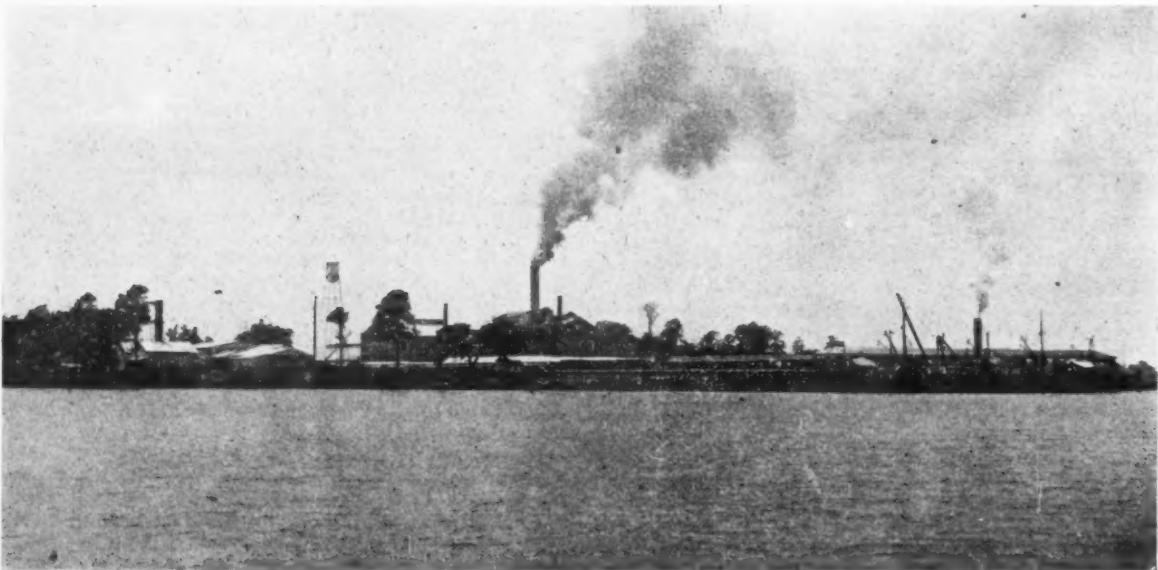
The Savannah refinery is working night and day shifts, employing a total of 500 hands, and is receiving raw sugar in sufficient quantities from Cuba to keep the machinery steadily at work. About 25 per cent. of the product is brought in train-



VACUUM PANS IN WHICH SUGAR SYRUPS ARE BOILED TO WHITE SUGAR.

loads by way of the train ferry operated in connection with the overseas extension of the Florida East Coast Railroad and delivered at the warehouse of the refinery in Savannah on the tracks of the Savannah & Atlanta Railroad. The rest of the stock comes by steamers, which discharge their cargoes at the docks of the refinery, connected with the plant by a long pier upon which electric trucks are operated, greatly facilitating the unloading.

As the large sacks of raw sugar are trundled up to the warehouse door an agent of the United States Customs Department stabs each with a long and keen-nosed trowel, drawing forth a sample of the contents and dumping it into a glass receptacle for



VIEW OF SAVANNAH REFINERY FROM RIVER. CARGO OF RAW SUGAR AT PIER.

subjected to the polarization test to determine the percentage of sucrose. The custom-house has an extensive laboratory in Savannah, where tests are made of the samples in order to arrive at the amount of the duty. In addition to similar tests conducted at the refinery laboratory, samples are sent to the buyers and sellers' chemists in New York, as well as to the New York trade laboratories. The closer two of these last three tests are used for a basis of settlement between the buyer and seller.

Long years of sugar refining have developed the fact that great waste may occur if the bags in which the raw product is shipped are not thoroughly cleaned of their contents. The bags are not only emptied and turned, but are then carried through a brushing machine, an arrangement of much mechanical skill which brushes

sification in the form of parks, hedges and gardens. A nursery has been started and the entire scheme is in the hands of a professional landscape gardener regularly employed by the company.

The expansion of the plant is inevitable, plans for this contingency having been made in its construction for increasing the capacity 50 per cent. when the demand arises.

What the coming of this industry has meant to the port of Savannah can be estimated by the increase in customs duties of approximately \$10,000 a day. The bringing of many additional vessels to be discharged here and the loading of return cargoes is not the least of the trade benefits wrought through this agency, not to mention the market it has made for huge quantities of coal and other supplies, the consumption of barrel materials and the establishment of a barrel factory by another corporation alongside of the plant.

An average of four or five vessels a month discharge cargoes of raw sugars at the refinery, and heavy exports have been made to Liverpool and London since the first of the year.



PACKING-ROOM FOR REFINED SUGAR.

the clinging matter from the coarse texture of the bagging. Seemingly little of the raw sugar is dusted from each bag, but the salvage from this process well repays the expense of achieving it.

From these rather elementary and commonplace steps the sugar is carried through the melting and refining processes, giant machines of various types and descriptions, in monster shapes and huge emplacements, bewildering in bulk and mysterious of purpose and operation, pounding and thundering at the task of creating the snow white streams of granular sweetening that finally pour through the chutes to fill the bags and barrels in the packing-room.

Every successive glimpse in the process of refining shows a nearer condition to the perfected granulated sugar, to which the trade name of Dixie Crystals is applied by the Savannah refinery.

The fascinating and ponderous orgy held by these great urn and tomb-like vats and machines, with inward works of whirling and whirring activities in ceaseless grind and clatter, reaches a most interesting and somewhat ludicrous climax in the filling-room, where empty barrels are lined up in a double row, fastened upon pedestals that are given a jumpy motion, one side up and one side down, to aid the settling of the sugar as it is poured in from the mouth of the chute above each barrel. The sight of the barrels bobbing up and down in rhythmic synchronism gives the impression of an animated dance, which fits grotesquely the sonorous music with which the place hums and vibrates.

The sugar refinery has been more than an isolated industry from the day it began operations, having assumed from the beginning the original purpose of its promoters and owners to become a community with all the essentials and conveniences and diversions of community life.

Hence at the outset the plans were made to include a hotel for bachelors and homes for families whose heads are employed in the refinery, and provisions were made for the furnishing of supplies through a community store at Savannah prices. Cheap rentals are maintained for those who occupy the model cottages, which contain hot and cold water and lights, the monthly rental on none of the houses running above \$10 a month. In extension of this plan the company has recently purchased 50 acres of land additional to the original 30 acres for the site and has mapped out an extensive and comprehensive system of landscape beauti-

Pig-Iron Manufacturers Hope for Stronger Market.

Birmingham, Ala., May 5—[Special.]—A hopeful attitude of an early recovery in the pig-iron market is now being assumed by manufacturers of the product in the South, and while the output at furnaces will not be increased materially until there is a better demand, it is acknowledged in some offices that sales and delivery recently have about equaled the make. The production is very low, the figures for the past month showing a decided falling off in comparison with the same month a year ago. The Tennessee Coal, Iron & Railroad Co. will blow in a furnace this week on ferro-manganese. This will not add very much to the total production. There are four or five furnaces in shape to resume operation on 24-hour notice, but there is no hope that this will take place this month. The sales are still in ear lots, and in many instances the purchasers are still asking for concessions on the prices, indicating that a waiting game is being played by the consumers. The manufacturers deny that they can afford to make any reductions in the prices of pig-iron. Re-adjustments are to be undertaken shortly, but how far this attempt will go remains to be seen. The costs of production of pig-iron and other products of a kindred nature are mostly of labor. There is some hope in this section that the conference in Washington with leaders of the important industries and the railroad and commerce departments will bring about some relief and start a buying movement in pig-iron.

Cast-iron pipe plants are getting a few specifications for their products and the building movement throughout the country is being felt by the soil-pipe and sanitary-pipe makers as well as by the radiator manufacturers and others. Stove producers report some improvement in business.

Machine shops and foundries in Birmingham have considerable work in hand with marine engines, cottonseed-oil machinery, sugar refinery machinery and other lines. The marine engine contracts in this district will last the machine shops and foundries working on them for a year and longer yet.

The scrap iron and steel market continues dull except as to No. 1 cast, which is being bought in by pipe plants and heavy melting steel consumers of which are preparing for better times of the future. Some of the dealers in old material in the Birmingham district are not willing to sell their heavy melting steel at prices offered by some of the more extensive consumers. Dealers are also holding back a little now on their No. 1 cast.

Quotations for pig-iron and old material in the South are given as follows:

PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent. silicon, f. o. b. furnaces Birmingham, \$26.75; differentials, same as before; basic iron, \$25.75, f. o. b. furnaces.

OLD MATERIAL.

Old steel axles.....	\$18.00 to \$20.00
Old steel rails.....	12.00 to 14.00
Heavy melting steel.....	15.50 to 13.50
No. 1 R. wrought.....	12.00 to 14.00
No. 1 cast.....	22.00 to 24.00
Stove plate.....	13.00 to 15.00
Old car wheels.....	12.00 to 13.00
Old tram-car wheels.....	16.00 to 18.00
Cast-iron borings.....	6.50 to 7.50
Machine-shop turnings.....	6.50 to 7.50

The twenty-third annual convention of the Interstate Cottonseed Crushers' Association will be held in New Orleans, La., May 19-21. Headquarters at the Grunewald Hotel.

Materials and Ships Needed in Reconstruction of France Can Be Supplied by United States.

France looks to the United States to supply credits in dollars covering about 50 per cent. of her total purchases for reconstruction, according to the statement made by the French High Commissioner when he was in this country.

Next to the financial requirements, it is of first importance for France to be able to construct or to produce ships. She must have ships at once either to get from outside markets raw materials or to rebuild her foreign trade. It is absolutely certain that this is one great opportunity for the United States to come to France's aid immediately.

Roughly speaking, the area of France and Belgium, which was absolutely devastated by the Germans during the war, is a territory equivalent in size and extent to what is generally known in America as the New England States. Indeed, these regions are very similar. The New England States contain in proportion to their area a greater number of manufacturing plants and a greater quantity of manufacturing equipment than any other part of the United States. The destruction of these plants and equipments would not only be a serious loss to the United States, but to the whole world.

The vandalism of the Germans cannot be exaggerated. In the devastated areas they stopped at nothing. The destruction of trees, the pollution of wells, the poisoning of fertile soil, the destruction of buildings as well as of human life were all part of the campaign carried out with true Prussian ruthlessness and thoroughness, to not only temporarily disable the section, but to render it unproductive and helpless for years to come.

In addition to its agricultural value, the devastated area was, before the war, thoroughly equipped with looms, spindles and textile machinery. Today these are all either destroyed or carried away. To restore the section to industrial productivity, it is first necessary to restore these manufacturing facilities and also to undo the agricultural devastation. Pierre Hamp, writing in a recent issue of *The New France*, advocated a demand that before the manufacturers of Germany should be allowed to resume their own textile manufacturing they should first be required to replace the equivalent stolen or destroyed from Belgium and France. Conditions in Germany are chaotic and are apt to remain so for some time. The enterprise of the people of the devastated section is such, however, that they are not apt to wait for Germany to be compelled to restore their lost machinery, and it becomes incumbent upon England and the United States to provide for this restoration. This in itself provides one great channel for American machinery houses to participate in reconstruction.

In the equipment and materials for the resumption of agriculture in this section there exists another great opportunity for Americans. The impoverished and poisoned soil must be restored by modern, scientific methods and materials. It is impossible to believe that the producers of fertilizers and agricultural chemicals in the United States will rest inactive and allow Germany to rebuild herself by furnishing these materials, and yet, unless immediate action is taken, this is apt to be the case. Furthermore, the Americans who have been in France in the last couple of years have done a wonderful missionary work among the French peasants in instructing them in the use of American agricultural machinery, and tractors, plows, harvesters, engines and tools of American design and manufacture will find a ready market in these sections.

A great amount of structural rebuilding must also be accomplished, and this requires everything from cement, nails, lumber, hardware, masonry to paints, roofing and similar materials, and opens another great field for American activity. Transportation must also be improved, both by rail and motor. Food must be furnished to a land which has been rendered physically impossible of production; the inhabitants must be clothed and shod, and also additional labor must be provided.

The average American business man unfortunately seems to regard France as being a region of almost polar remoteness. A casual glance at any map, however, is sufficient to bring home to us the fact that Paris is no further from New York than is San Francisco, and with the wonderful financial machinery provided by American and foreign banks there is no reason why American business men and manufacturers cannot handle their commercial

relations with France upon a basis similar to that which they maintain with the Pacific coast territory of the United States.

There is a wonderful feeling of friendliness toward Americans throughout France, and this should be cultivated. The cheapest and best way in which to do this is through advertising and the distribution of illustrated catalogues. The French are adaptable and intelligent. They possess sufficient imagination to visualize the actual object from a pictured reproduction. The equipment of our army, both on the fighting front and behind the lines, has made the average French man and woman familiar with the best examples of American products, and there should be little or no difficulty in demonstrating that American goods at fair prices are well worth while being adopted by the French.

In conclusion, America's immediate and future opportunity lies—

First—In providing half of France's capital requirements in reconstruction;

Second—In furnishing the necessary shipping to carry the raw materials and manufactured products which are needed in this reconstruction, and

Third—in supplying just as much of these products at fair prices as can possibly be done.

If we hesitate, we will not enjoy the results made immediately possible by our recent close association with France in the war. At this time no nation is better prepared to furnish these materials, or, in fact, nearly as well prepared as we are. We must not allow the opportunity to pass from us for lack of recognition.

American Mining Congress Organizes Alabama Chapter.

Birmingham, Ala., May 5—[Special.]—Alabama Chapter of the American Mining Congress has been organized in Birmingham, resulting from the efforts of J. T. Burns, Western secretary of the congress. Following directors were chosen for the local chapter: T. H. Aldrich, Birmingham; A. B. Conklin, Ashland; J. B. McClary, Birmingham; Leo K. Steiner, Birmingham; Theodore Swann, Birmingham; Floyd Weed, Birmingham; Eugene Fies, Birmingham, and C. T. Fairbairn, Birmingham. The officers are T. H. Aldrich, mining engineer, governor; J. B. McClary, coal operator, first vice-governor; A. B. Conklin, graphite operator, second vice-governor; Eugene Fies, graphite operator, third vice-governor; John N. Vincent of the Alabama Coal Operators' office, secretary; Leo K. Steiner, graphite operator, treasurer; Theodore Swann, manganese operator; Floyd Weed, graphite operator; Leo K. Steiner, graphite operator; C. T. Fairbairn, coal operator, and L. Sevier, coal and ore operator, executive committee. The charter from the National Congress will be issued shortly, when the membership shall have reached 50.

Mr. Burns in his address at the meeting at which organization was perfected outlined the workings of the congress. Among other things, it seeks to secure legislation that will help the mineral industry of the country and to prevent adverse laws. "In this work it not only initiates laws, but tries to checkmate bills that would work an injury to it. The mining industry furnishes about 75 per cent. of the tonnage of the country," said Mr. Burns, "and leaders in that industry believe that upon this showing it is entitled to have a separate department of the Government, the same as agriculture, labor, commerce and other lines."

Missouri Iron and Steel Corporation.

A daily output of 150 tons of iron is planned by the Missouri Iron and Steel Corporation of St. Louis, which is building a furnace near Brandsville, Howell county, Missouri, on the main line of the Frisco Railway. Outlining his company's activities, F. J. Stuart, treasurer, advises the MANUFACTURERS RECORD:

"We purchased the blast furnace of the Jefferson (Tex.) Iron Co., and have completed dismantling this property. We have moved it to a new station adjacent to Brandsville. Our superintendent, John P. Marshall, considered the boiler plant entirely inadequate, so in re-erecting this furnace we are using 300-horsepower Stirling boilers and using other new material in order to make the furnace up to date.

"The corporation also owns 20 ore deposits. Among these are the Carson mine and other properties formerly owned by the Kingsbury Mining Co., West Plains, Mo., and the properties of the Haight Orchard & Development Co., Brandsville."

Building Outlook Promising in Kentucky

[Special Correspondence Manufacturers Record.]

Louisville, Ky., May 5.

Back in February, at a meeting of the Kentucky Retail Lumber Dealers' Association, a movement was launched for the purpose of preparing a big publicity and advertising campaign to interest capital in building investments. The Kentucky Clay Products' Association discussed similar plans. Later the Louisville Builders' Exchange endeavored to get the building-supply houses, engineers, contractors, builders, plumbers, heating and ventilating concerns, realty men and general interests back of the movement. Committees were appointed to raise necessary funds, and the campaign is getting in shape for a start.

Such a campaign, coming at this time, will be of vast aid in keeping labor employed, both on construction and in producing materials. It is claimed that the lumber market will continue firm, due to the shortage of production in the South as a result of wet roads all spring, and due to the export demand. Cement and stone prices as well as sand and gravel prices are expected to remain high, due to the tremendous volume of road work started or in prospect. Kentucky alone has plans for many miles of new road. There is also a considerable volume of sewer work contemplated.

Every month this year has shown an increase in building operations in Louisville, and each month has shown a big increase over the corresponding month of last year. Louisville is short of housing facilities, as is the case in almost every city of size, especially cities with military camps, such as Camp Taylor and Camp Knox. The Quartermaster's Department, across the river at Jeffersontown, Ind., has also materially increased the demand for residence property. There has been almost no building during the past two to three years, and housing facilities are far from adequate.

The last director census shows Louisville with a population of approximately 278,000 people, while there has been a big increase in the population within a 10-mile radius of the city, with the result that rentals have advanced 18 to 30 per cent. There is a big demand for apartments of all kinds, and for bungalows and medium-sized dwellings. The cost of building is estimated at from 35 to 50 per cent. greater than in 1914, but some building material is off in price, especially clay products.

In the matter of factory facilities, the city is at a disadvantage. The Louisville Industrial Foundation, the million-dollar factory-getting division of the Board of Trade, has filled up every empty plant available in the city, and is handicapped in securing additional industries without plants of any sort to house them.

There is a need for construction of all sorts of residence and factory property, although there are not any large number of plants needing extensive additions just now, as additions made during the war will take care of many of them for some time to come.

During the past year there has not been any great amount of new construction. The Standard Oil Co. of Kentucky and the Aetna Refining Co. erected refineries south of the city. The Louisville Water Co. is enlarging its pumping plant at a cost of a million dollars or more. The Louisville Cotton Mills Co. spent over \$100,000 in new buildings and equipment. B. F. Avery & Sons are working on large additions to their plow factory to take care of new lines to be manufactured. The Kentucky Wagon Manufacturing Co. installed several additions during the year, and recently announced that it had plans for further enlargement and manufacture of additional lines. There has been practically no church or school work of size in the State.

Now, however, things are opening up, and there is a tremendous amount of work in sight. Architects and engineers have several millions of dollars in proposed work in their offices. Some of the leading building supply houses report that the demand has picked up wonderfully, and that they expect to be very busy within a month or six weeks. The Ohio River Sand Co., the E. T. Slider Company, the Nugent Sand Co. have all started work in digging sand and gravel from the bed of the Ohio River. The plant of the Coral Ridge Clay Products Co. is running. The Speed interests are operating their lime, cement and rock quarries in Southern Indiana. The Kosmos Portland Cement Co. is running full time at its plant at Kosmosdale, Ky. The smaller brick, lime, cement, plaster and other plants are

running, and the general report is that the demand for materials is picking up and from a hand-to-mouth condition is getting on regular delivery basis.

In a recent report from Washington it was claimed that Kentucky has projects amounting to \$13,155,000 for the year, this report coming from the Department of Labor. However, that figure would not begin to touch the projects in view, although it is possible that it will cover the actual construction.

The Jones-Dahney Company, recently incorporated to manufacture varnishes, has a site at 11th and Magnolia, and plans for a big fireproof plant, which will cost between \$100,000 and \$200,000.

Joseph & Joseph, local architects, have plans for the recently-organized Contractors' Construction Co., which will erect a \$300,000 apartment-house on Eastern Parkway, to contain about 45 apartments. This is a co-operative company organized by about 40 contractors, building supply dealers, etc., in an effort to interest capital and start things going.

The Paul Jones office building was recently purchased by a syndicate headed by Marion Taylor, and it is reported that plans are being drawn for several additional stories to the present seven-story building, provision for which was originally made when the heavy steel work was installed. It is planned to extend the building over an adjoining open lot.

The Inter-Southern Insurance Co. has had plans drawn by D. X. Murphy & Bro. for a large addition to its 19-story office building at 5th and Jefferson streets. Land on the east of the building has been secured, and it is planned to run the addition up at least 10 stories this year, making it to conform with the steel, brick and concrete building. This work is imperative, as the new Citizens' Union National Bank, a \$50,000,000 organization, is crowded for floor space, and the building is all occupied.

The National Bank of Kentucky is occupying temporary quarters at 5th and Main streets, in the obsolete Bank of Commerce office in the old Keller building. It has been planning to erect a large addition to the fine German Bank building at 5th and Market streets. However, this building may be sold to the Federal Reserve Bank, which is in crowded quarters in the Columbia building.

In the original construction of the new Speed building, at 4th and Guthrie streets, arrangements were made for a 10 or 15-story building, but due to the war it was only run up five stories. Plans for extending the building upward are expected at any time, and the Speed interests also have a considerable amount of open space extending to 3d and Guthrie, which they expect to build upon shortly.

The Elks' Club has secured additional adjoining property, and expects to build an addition and extend its present quarters. It also expects to remodel an adjoining building.

The Louisville Industrial Foundation has plans under consideration for a factory loft building to cost from \$1,000,000 to \$1,500,000, of steel and concrete construction, and designed to house a large number of smaller industrial concerns which could be brought to Louisville if available lofts were at hand.

The Stoll Oil Co. of Louisville is now working on plans for a refinery at its oil plant on "the Point," and expects to get started within a few weeks.

Another big refining project is on at Lexington, Ky., where the Fleisher Petroleum Co. is planning a refinery of 3000 to 5000 barrels capacity, having secured site.

Lexington numbers two big hotel projects in its building plans, one being a 12-story house and the other a 10. Either one may come to life, as the oil interests are behind the plans.

At Frankfort, Ky., there are two hotel projects still under cover. Since the old Capital Hotel burned, about two years ago, Frankfort has been without suitable hotel accommodations, especially during the legislative sessions, as the present hotels are small and inadequate. However, an addition is to be built to the Frankfort Hotel at once, and the Phoenix at Lexington has also announced plans for enlargement.

At Scottsville, Ky., bids have been received on a \$50,000 hotel which is badly needed as a result of the oil boom. Bowling Green, Ky., Glasgow and other points also have hotel projects.

Government appropriations for Kentucky for building post-offices total several hundred thousand dollars. Work on Camp

Knox is progressing, and is still taking material. Government work on the Louisville and Portland Canal is still going on, and won't be finished for some time to come. There is also much work on the Ohio to go ahead this year.

Two hotel projects are being discussed in Louisville. T. M. Brown and J. G. Brown, millionaire lumbermen, head of the house of W. P. Brown & Sons Lumber Co., Louisville, a hardwood concern with six or more big Southern mills and vast timber acreages, have recently purchased two adjoining pieces of property at 4th and Broadway. The Browns never take flyers into side lines, and while they assert that the property was purchased for investment, with plans for small Fourth avenue stores, it is claimed that the Statler Hotel interests of Cleveland plan erection of a large hotel on that corner. In addition to the two pieces of property purchased, the Browns have options on adjoining property, it is claimed. The property purchased cost in the neighborhood of \$200,000, and improvements of about \$50,000 would be needed to convert it into small stores.

On the corner opposite the Brown property is the old McKnight property, purchased by the Seelbach Hotel interests under an agreement that a high-priced building must be erected prior to 1924. Rumors have been out for several days to the effect that the Seelbach interests were planning to remove the temporary structure on the corner and go ahead with the main building, as hotel accommodations in Louisville are not adequate.

The Watterson Hotel Co. has recently made an offer on the building of the Business Women's Club adjoining, but hasn't been able to buy. This building could be converted at low cost, as it was erected at about the same time as the hotel. The latter needs additional rooms badly, and in the event it cannot purchase the club building, will probably extend the present hotel structure back through the alley at a considerable cost.

Much road and street work that was passed up during 1918 is developing. Louisville has an annexation ordinance to take in a considerable amount of suburban property, but the residents want a guarantee of firehouses, streets and sewers first. Mayor Smith is now considering a \$5,000,000 sewer bond issue for the suburban property.

At Hickman, Ky., the Masonic Lodge has plans for a \$50,000 lodge building, and the Masonic Lodge at Jeffersonville, Ind., has similar plans. At New Albany, just across the river from Louisville, the P. N. Curl Grocery Co., wholesalers, have announced that they are planning to erect a \$75,000 warehouse.

The Wood-Mosaic Company of Louisville and New Albany, Ind., manufacturers of veneers and lumber, have started work on a new veneer plant at the Louisville mill, which will cost between \$100,000 and \$150,000 completed.

The University of Louisville has made an offer on the old Boys' High School, which it plans to convert into a huge medical laboratory at a considerable cost.

The State University, a negro institution operating a Baptist seminary at 720 W. Oak street, has plans for a \$50,000 dormitory for students.

The Board of Public Works is discussing the expenditure of \$100,000 for the first unit of new river shipping facilities, planned to be so constructed that river and rail freights may be transferred to advantage, thereby aiding river transportation.

Throughout both the eastern and western sections of the State the oil interests are buying large quantities of machinery, drilling equipment, tanks, laying pipe lines, etc., to take care of Kentucky oil production, which has mounted to an average of 160,000 barrels weekly within the past four years from practically nothing before the war.

These are the principal projects under way or under discussion in Louisville. It is hard to say just how much of the proposed work will actually materialize, but a considerable amount of the larger operations is fairly likely to come through. Then again, there is much small building, apartment-houses, etc., upon which there is no definite information available, but which runs into good figures. There is an especially active demand from the rural districts, where the farmers have money and lots of it this year. During March the Kentucky Federal Farm Loan Bank loaned \$1,142,000 to Kentucky farmers, and it is certain that it wasn't all for seed and implements.

The forty-sixth annual meeting of the National Conference of Social Work will take place at Atlantic City, N. J., June 1-8. The predominant issue for discussion is the problem of the wage-earner.

Dairying Profitable in Southwest Texas.

Alice, Tex., May 5—[Special.]—It is somewhat remarkable, perhaps, that the largest and some of the most successful dairies in Texas are situated far down in the chaparral portion of the State, not far from the Rio Grande. It is a region of big ranches and sparse population. The dairy of Ed. Lasater at Falfurrias, which embraces a herd of more than 2000 Jersey cows, paved the way for the establishment of other dairies throughout that region. In Jim Wells county there was organized the Jim Wells County Co-operative Creamery in order to provide a home market for the butterfat of local dairy herds. Its headquarters are at Alice, and it manufactures what is called "Alice Brand Butter."

It was in the early part of 1917 that the dairy farmers of the Premonit Rural Institute in Jim Wells county conceived the idea of binding themselves together, pledging their cows and cream to a factory of their own, so as to have efficiency both in manufacturing and selling their products through a non-speculative system. This idea was soon realized, the farmers co-operating as was originally outlined.

F. V. Evans, president of the Institute, was sent by the members to Alice and other parts of the Alice trade territory to see what could be done toward getting more cows and building a plant.

He met with a hearty response from all who were interested in seeing the dairy, hog and poultry business developed through co-operation. On August 1, 1917, the Alice creamery was taken over by the Jim Wells County Co-operative Creamery Co.

The institution has enjoyed a steady growth from the first day until the present, notwithstanding the severe droughts of 1917 and 1918. During that period the creamery was making an average of only 600 pounds weekly of the very highest grade of butter at the first. The highest price is paid to the producers for their products, and in addition the net dividends are given to the members.

The creamery is now bringing to Alice from outside consumers about \$300 daily, which is distributed to the producers of the Alice trade territory. Consumers of a great many towns and cities are supplied from Alice, but the principal market is in Laredo, which has developed a demand far beyond the supply. It is declared that there is a market for butter in Mexico waiting to be served.

Through the efforts of these leading dairymen, backing up their own creamery, dairying has proved profitable and opened the way to the territory in Southwest Texas. The creamery's slogan is: "Take care of the dairy cow, the hen and pig, to meet an every-day expense by an every-day production."

Mr. Evans, the original promoter of the creamery, is now employed as its solicitor for cream and to encourage all those who want to build homes to come to this section. He is of the opinion that within one year more 1000 dairy farmers will be producing cream products, poultry and hogs in this territory.

Corundum and Emery from Southern Mines.

The production of corundum and emery in the United States in 1918 was much smaller than in the two previous years, according to statistics just compiled by F. J. Katz of the United States Geological Survey, Department of the Interior. The quantity of corundum and emery mined was 10,139 short tons. The quantity of crude emery and corundum marketed was 8702 short tons, valued f. o. b. mines at \$95,248. The output was 45 per cent. less than that in 1916 and 52 per cent. less than that in 1917. The output in 1916 and 1917, however, was abnormally large and was stimulated by the demand due to the war, which required enormous quantities of abrasives for making munitions and other articles needed for military use, and prevented the importation of foreign corundum and emery, the former chief source of supply. Though the employment of substitutes and the increase of imports in 1918 reduced the demands for the domestic abrasives, the output was many times that of normal years before the war.

Corundum was mined in small quantities by two operators in Jackson and Macon counties, North Carolina; emery was mined by seven or more operators in the Peekskill district, New York, two in Virginia and one in Macon county, North Carolina.

Southeastern North Carolina a World of Green

ACTIVITY IN TRUCKING, NEW BUILDING AND GOOD ROADS CONSTRUCTION THROUGHOUT LARGE SECTION OF STATE.

[Special Correspondence Manufacturers Record.]

Raleigh, N. C., May 2.

In the course of a fortnight's swing through Southeastern North Carolina, just ended, the writer found many interesting developments. The railway town of Rocky Mount, two miles long, and with a particularly wide street, through the center of which the Atlantic Coast Line trains are forever passing, is making a \$75,000 addition to the Ricks Hotel, increasing the number of its rooms by 80. At Tarboro, 12 miles away, two large brick tobacco warehouses and two brick tobacco storage-houses are under construction, to be ready for what promises to be a bumper crop of tobacco this year. This crop ripens very early in Eastern North Carolina, and the acreage is tremendous, for the high prices in 1918, to use the phrase of a grower, "set people crazy." Tarboro has built a milk pasteurizing plant and is getting ready for its biggest fair. The Coastal Plain Fair is held there, covering 10 counties up to this season, and now two more have been added. Fine farming marks the ring of counties included in the Tarboro zone.

On this tour thousands upon thousands of bales of cotton were noticed lying on the ground, exposed to all weather, and the loss by water damage is sure to be tremendous. This cotton is not insured. Moreover, in some cases empty buildings were nearby. Almost no cotton is being sold; never before was it so generally held from market.

At Goldsboro two new grammar schools are under construction, both built of brick and of approved design. At Clinton, in the county of Sampson, there are more huckleberries produced than in any other place in the United States, and they bring in great sums of money, finding a ready sale in the big markets. Another feature is the growing of early sugar corn, which is shipped in special crates before other varieties are ready. Near Clinton is Salemburg, which has the honor of being the first Model Community ever established in the United States. A few years ago the United States and this State made a test of the possibilities of a model community on Knott's Island, near the coast, and it was so successful that an area of 25 square miles at Salemburg was selected and put in order, all the people within it being immunized from communicable diseases, the fly and the mosquito eliminated, the water supply made entirely sanitary and model schools for whites and negroes built, with community houses and libraries.

At Kenansville, in Duplin county, State convicts were found building a 30-foot sand-clay highway, the first real one ever constructed in that county. Next they will build Duplin's section of the highway from Goldsboro to Wilmington, to tie-in with the Central Highway.

On the way to Wilmington Castle Hayne was passed, where there is a great bed of phosphate, once mined quite extensively. Here is one of the Hugh McRae colonies, largely composed of Belgians. At Wilmington it was found that a vote is soon to be taken on the issue of \$350,000 of bonds for the schools, to be added to \$125,000 already available. A high school to cost \$285,000 will be one of the new buildings. Wilmington has easily one of the finest public-school systems and the finest group of school buildings in the State. There are two shipyards, and one has the honor of being the first yard in the United States for concrete ships. From this there will soon be launched two concrete vessels. Two four-masted French vessels had just arrived with nitrate for the farmers. Wilmington has the largest playground in North Carolina, a memorial of the late Bishop Robert Strange, and will soon have the Pembroke Jones playground, the sum of \$50,000 having been bequeathed for this purpose.

The next place visited was Chadbourn, on the Atlantic Coast Line, famous as one of the great centers of strawberry farming in the country. It is on a railway which, during the Civil War, was the great artery on which the South depended during the long struggle. It is interesting to know that 22 years ago a suggestion by one of the staff of the MANUFACTURERS RECORD brought about the culture of strawberries. He said to Mr. J. A. Brown of Chadbourn, "Why don't you raise truck and berries?" The idea was taken up at once, and Chadbourn came to be for strawberries what Weathersfield, Conn., is to onions. Land

was cheap, say 60 cents an acre, largely cut-over. Mr. Brown bought 1734 acres for \$1200. In 1897 the first strawberries were produced, 600 crates. By 1907 the output had risen so that it filled 1623 refrigerator cars, and 180 cars were actually shipped in one day. There were 28,000 pickers in the fields, besides local talent. That year there occurred the famous "car famine," and the Atlantic Coast Line had to pay, because it failed to furnish the cars, \$480,000 to the growers. Hundreds of thousands of crates were hauled away and dumped into the streams.

Later there came good prices for cotton and tobacco, the latter a new crop in that region. Then came the lack of labor, and now the strawberry acreage has been reduced in favor of these other crops, until this year it is down to 2500 acres and a crop of 600 cars is being picked. Over 2000 pickers were in the fields. Prices run high this season, and bidders are eager. They range from \$5.50 to \$10 a crate of 32 quarts. Mr. Brown, who is one of the big authorities on strawberries, says the berry area in the United States has been reduced by 32,000 acres this year. At Tabor, in the same county of Columbus, is also a strawberry zone, the places being near together. Tabor has a factory where strawberry juice is put up.

Mingled with the berry fields are wheat, rye, oats, cotton, corn and potatoes, together with peach orchards, so that this section is a world of green. Most of the people are from the West, and they came in a colony as a result of the missionary activities of Mr. J. A. Brown. One man drove in a wagon all the way from Nebraska, with his wife and little children, and as we passed his fine home, with berries and orchards and growing crops of various kinds, fine stock, silos, etc., Mr. Brown remarked: "He is worth more today than I am." In that section what the people call "red cane" is grown, this being sugar-cane, and it is the only place in the State where it is produced. Sugar is not made from it, but an excellent syrup.

In company with Mr. Brown, who is a State Senator as well as a captain of industry, a visit was paid to Lake Waccamaw, lying along the Atlantic Coast Line. It is 7x5 miles in extent, intensely blue and in a beautiful setting. On its northern shore, which is a bluff, are extremely fine farms, with peaches and pecans and all sorts of crops, including alfalfa. This lake has been set apart by the Legislature as public property and made a playground for the people, the county commissioners given charge of it and forbidden ever to dispose of it. White Lake, another splendid sheet of water, in the sister county of Bladen, has been treated the same way. For many years the 4th of July has been made a rallying day for whites at Lake Waccamaw and the 6th for negroes, and they go there by thousands every season. The Waccamaw River runs out of the lake and empties at Georgetown, S. C.

At a tiny place in Columbus county, on the railway, is one of the two plants now making turpentine tools in the United States. Tar, pitch and turpentine used to be staples in North Carolina's trade with the world, but on this journey the writer did not see a single turpentine distillery, for the industry is almost extinct.

At Elizabethtown, the county-seat of Bladen, the Cape Fear River was reached and there was heard the whistle of a steamer going from Wilmington to Fayetteville. This river used to be one of the State's great arteries of trade, for midland North Carolina got its goods mainly from Fayetteville or Petersburg. The most obliging people in the world are to be found on these steamers on the Cape Fear, as the roustabouts bait the travelers' fish-hooks at the numerous landings, so that no time shall be lost, and as there are plenty of fish there is always something to put in the frying-pan from this source.

At Lumberton, in Robeson county, another fine farming region, there stood at the station a train and engine marked "Raleigh & Charleston Railway." This road really goes neither to Charleston nor Raleigh, but only from Lumberton to Marion, S. C. A survey was made for a straight line from Lumberton to Raleigh, but the sale of a link from Raleigh to Fuquay Springs ended this hope.

Louisiana Sugar Production Above Normal for 1918-19.

New Orleans, May 2—[Special.]—The Louisiana sugar production of last season was approximately 308,000 tons, including syrup as sugar at five pounds of sugar to the gallon of syrup. Reports from practically every plant in the State at this time are the basis of this statement. This stamped the 1918-19 production in Louisiana as slightly above normal, which is 300,000 tons. The Government crop statistician at New Orleans has not yet announced his figures on the production, but it is certain that his calculations will not vary greatly from this amount.

And this report comes in a week of more than usual activity in the Louisiana sugar parishes, where there seems to be always something doing. The sugar towns, like all of the other towns and cities of the country, are far behind on their housing increases, and reports come from many of them of standing room only as far as dwelling houses for white families are concerned. New little banks organized in the interest of the small cane growers, with charters prohibiting any one man from owning more than 10 shares of stock, are being chartered and projected in the sugar belt. E. F. Dickinson and other prominent sugar men have organized a bank of this character at Lockport, La., in the very fruitful Lower Lafourche delta section, with a capital of \$20,000.

Another big addition to the Jefferson Parish industrial district, opposite New Orleans at Marrero, has just been announced by the Heaslip Sugar & Molasses Co. of New Orleans, already big distributors of Louisiana sugar plantation products. They have bought a large factory there and will transform it into a syrup-canning plant, operating on a scale comparable to the other big Louisiana cane-sugar concerns, like Penick & Ford, Ltd., who are in the same industrial section. The capitalization of the Heaslip company will be increased to a half million dollars. They will specialize on the manufacture and canning of "Cosa Naturel," the old-fashioned pure cane syrups and molasses.

Another big cane-syrup plant is projected for Lafayette, La. L. J. Martel, J. S. Martel and Robert Davidson of New Orleans are the promoters of this new plant. The Martels are old-timers in the Louisiana sugar game.

The South Bend Sugar Factory, Inc., has been chartered at Centreville, La., to own and operate a thoroughly renovated old St. Mary parish sugar plant which has only operated about one season in the last 10. It is capitalized at \$80,000, and the officers, all of whom were connected with the eminently successful co-operative sugar manufacturing enterprise of the Centreville Co-operative Sugar Co., near the same town, are John C. Clausen, president; L. C. Grevenberg, vice-president, and I. S. Wooster, secretary-treasurer. The co-operative sugar-growing and manufacturing ventures which these men have fostered have inspired many other groups of can growers, and all of these ventures have succeeded.

Estimates are now being prepared on the cost of transforming the Sterling plantation granulated refinery at Franklin, La., which is owned by Williams, Inc., with C. Del Kamper as general manager, into a bone-black sugar refining plant.

The next sugar crop in Louisiana will not exceed 275,000 tons, according to present indications. Bad planting weather and bad seed have brought about this decreased tonnage outlook. The result is that the planters will, as a general rule, increase their rice plantings materially.

Wilbert's plantations in Iberville parish are a veritable garden spot now, because they planted practically their entire 1919 crop last fall and thus avoided the spring period of untoward weather conditions. Wilbert's Myrtle Grove sugar factory ground more than 120,000 tons of cane last season. They will grind closer to 150,000 tons in 1919.

The annual election of the officers of the American Cane Growers' Association will take place at the St. Charles Hotel, in New Orleans, on May 8, at 2 P. M. The city will be crowded with planters on that day.

Sugar machinery experts have just completed tours of the sugar parishes, making surveys of the conditions for their various sugar machinery building firms. These surveys herald the more efficient covering of the sugar belt by the sales forces of these manufacturing concerns.

Reports brought to Louisiana from Porto Rico concerning the 1919 sugar crop are to the effect that, due to burnt cane and other causes, the cane there is not yielding any better than in

Louisiana when disastrous freezes have occurred. Machinery breakdowns have also contributed to the generally unfavorable sugar season, which will soon end in that American island possession.

R. E. Glass of Nicaragua and New Orleans, visiting New Orleans this week, announced that his company would build another sugar factory in Nicaragua, which would give them two of the finest sugar plants in the western sugar world. He was very enthusiastic about Nicaraguan cane sugar prospects.

Sugar importations at New Orleans during 1918 totaled 728,000,000 pounds, and molasses imported in the same time amounted to 40,000,000 gallons. In February, 1919, sugar importations were valued at \$3,202,302. Molasses imported in February was valued at \$35,430.

Profitable Tobacco Season Closes in Danville.

Danville, Va., May 1—[Special.]—Final figures on the sales of tobacco on the Danville market, just closed, show that during the season, starting August 15 to April 18, 45,501,970 pounds were sold for \$15,538,544.67, or an average price of \$34.15 per hundred pounds.

The season will be long remembered by the planters for the fabulous prices which tobacco, no matter what the quality, reached, and by the warehousemen for the arduous work which it entailed. Many a warehouse owner got down to "brass tacks" and did a day's work in his shirt sleeves. First of all the draft thinned out the warehouse forces, then came the insidious influenza at the very time the market was in full swing, and in order to keep the market moving men who never thought of working had to get busy.

The season's average does not truly reflect the high standard of the local market. During the early part of the season and when the farmer was bringing in the best of his curings the average ran for several months at about \$38 per hundred pounds. As the market season came to an end there was a slump in prices, especially after the signing of the armistice, and this brought down the prices somewhat.

It is too early yet to make any intelligent forecast of the next season with the world's affairs coming out of the chaos into which Germany plunged them. It may be said, however, that the farmers are preparing for a normal crop about the same size as that just marketed.

Promising Wheat Prospects in Texas.

Fort Worth, Tex., May 2—[Special.]—According to reports received by H. B. Dorsey of Fort Worth, secretary of the Texas Grain Dealers' Association, prospects are fine for a bountiful yield of wheat in this State. An estimate based on these reports places the probable yield for the Panhandle alone at about 20,000,000 bushels. Some single estimates received by Mr. Dorsey place the probable yield of the Panhandle as high as 30,000,000 bushels, and other single estimates as low as 15,000,000 bushels. With splendid wheat crop prospects in North and Central Texas, the total yield of the State will be record-breaking, as the situation is now viewed.

One of the correspondents at Amarillo declares that the Santa Fe Railroad's agricultural agents estimate the Panhandle yield at 30,000,000 bushels. Another correspondent, the Panhandle Grain & Elevator Co., estimates the Panhandle has 750,000 acres in wheat and places the probable yield at 15,000,000 bushels. The acreage devoted to oats is fully twice what it was last year, according to the report.

Plainview reported that no grain was shipped out of there last year, and estimates that 500 cars of wheat and 40 cars of oats will be shipped from that point during 1919.

Wheat Acreage Increasing.

Whitesburg, Ky., May 5—[Special.]—Wheat growers' associations in a number of Eastern Kentucky counties last fall brought on increased interest in wheat growing in this section, and the sowing of the staple by a large number of the most progressive farmers indicates that the wheat growing industry will again be revived. The high price of flour has also stimulated the campaign for increased wheat acreage. Good flouring mills will be established.

Gushers Bring New Boom to Burk Burnett Field

[Special Correspondence Manufacturers Record.]

Austin, Tex., May 3.

The bringing in of four gushers northwest of Burk Burnett has resulted in a new boom in that field. Wichita Falls is again crowded. Oil stocks which were very seldom heard of before the new wells came in are being traded in very actively at remarkably high figures, and a large number of lease sales are made daily. Trading at Wichita Falls in leases and royalty in the new northwest extension of the field has amounted to upwards of \$5,000,000 for a 10-day period.

Burk Burnett and its immediate adjacent oil pools show a greater increase of production for the month of April than the Ranger field, due chiefly to the fact that more wells were drilled there and they are situated closer together than in the Ranger locality. Conditions in the two fields are entirely different. It has been said that every man has a chance of becoming rich in the Burk Burnett field, while at Ranger the oil land leases, both proved and speculative, are for the most part in the hands of large financial interests. The Burk Burnett townsite as well as the land for many miles around it is cut up into small holdings, which were acquired originally for the most part by men of little or moderate means. From a human interest standpoint, the development operations in the Burk Burnett field are ahead of anything else in the United States.

Another thing that serves to hold the attention of oil operators and the general public to the Burk Burnett territory is that it is the scene of big surprises from time to time in the way of new strikes that serve to widen the producing territory. Excitement over the recent bringing in of a 3000-barrel Burk-Waggoner well four miles northwest of Burk Burnett is increasing rather than diminishing. The fact that the oil is 42 degrees gravity, a lighter crude than the other petroleum of that region, and that it was encountered at a depth of only 1660 feet is regarded as conclusive proof that it comes from a new and distinct pool. It is also the accepted theory that the trend of this pool is northwest. This has caused a spectacular scramble for leases of land on both sides of the Red River for many miles in that direction.

The Burk-Waggoner well means sudden and enormous riches for a group of comparatively poor men who comprise the company. It was organized at Vernon, Tex., with a capital stock of only \$60,000. The company for a nominal sum purchased the oil rights to 60 acres of land upon which the well is situated. It was regarded as strictly a wildcat proposition, and difficulty was experienced in selling the stock. When the well was brought in the stock immediately jumped from \$125 a share to \$2200 a share, and offers of \$10,000 an acre were freely made for sublease of the remaining 60 acres. Some blocks were subleased at this price.

The daily crude oil production of Texas is now approximately 208,000 barrels, of which about 160,000 barrels comes from the North Central Texas fields and 48,000 from the Gulf coast fields.

It is expected that it may be some time before the new field of Blue Ridge, near Houston, is brought into a regular producing state, due to the fact that certain drilling problems must first be studied and overcome. The discovery well has been flowing in heads during the past several days, its production being only about 175 barrels a day. The oil is 24 gravity, with about 25 per cent. kerosene and 30 per cent. lubricants, and asphalt base. The greatest activity has been shown by oil operators and speculators in obtaining leases for miles around the new well. Prices paid for these leases range from \$100 to \$4000 per acre.

The Humble Oil & Refining Co., which is now a Standard Oil subsidiary, is active in acquiring leases around Blue Ridge, and will put down test wells. The West Production Co. is drilling a test well one mile south of the discovery well.

While there is a falling off in production of the West Columbia field, it is said this condition is only temporary and is due to shut-downs of some of the wells pending construction of additional pipe lines and storage tanks. The daily average for the field is now about 22,000 barrels. The Humble Oil & Refining Co., the Texas Company and the Crown Oil & Refining Co. are nearing pay sand with their wells in that field.

The Humble field, in the Gulf coast territory, keeps up its pro-

duction remarkably well, considering the length of time it has been an active factor in the oil industry. It is now giving a daily yield of about 9000 barrels. The Sour Lake field, another old-timer, is giving a daily production of about 7000 barrels. In the Goose Creek and other Gulf coast fields nothing of moment has occurred during the past week. Many wildcat wells are being drilled throughout East and South Texas, and some of these test holes are now down to a depth when it will be known soon what they may bring forth. In the lower Rio Grande border country several new drilling rigs have been installed, and the explorations will cover a big scope of country.

In the Brownwood district, in Central West Texas, deep-well drilling still continues with good prospects, it is asserted, of obtaining large production. The many shallow wells of that district are keeping up a fairly good output under the pumps.

In the Desdemona field the daily production is about 6000 barrels, with indications that it may in the near future be brought up to rank along with Burk Burnett and Ranger. The Electra and Iowa Park fields, which are located in the Wichita Falls territory, have been producing more or less oil for about eight years. Interest is now being shown in the possibility of the two fields being made to give large yields of oil by deeper drilling. Test wells are being put down with this object in view.

With an improvement in the condition of the country roads and a lessening of traffic congestion of the railroads, drilling operations in all the proved fields as well as in outlying territory show a big increase. In Hamilton, Stephens, McCulloch, Palo Pinto and other counties many rigs have been installed recently and new wells are spudded daily.

Capital is pouring into the State in a steady stream from the North and East for investment in oil land leases and other phases of the industry. The demand for wildcat holdings is one of the many sensational features of present-day activities. Big prices are being paid ranchmen all over West and South Texas for oil right leases of their properties. Benedum & Trees of Pittsburgh, Pa., have leased an enormous acreage in not only the oil-producing territory, but in localities far removed from any proved production. They are now getting ready to start a well on the ranch of James Patterson, about 25 miles north of Del Rio, on the middle part of the Rio Grande border region. E. H. R. Green of New York, son of the late Mrs. Hettie Green, has also leased a large acreage in that section and has installed well-drilling rigs.

Ed. Lasater of Falfurrias is reported to have leased 100,000 acres of his 300,000-acre ranch near that place to F. B. Ranger of Los Angeles, Cal., for \$50,000. Mr. Lasater also reserves one-eighth of the royalty of any oil that may be produced. This property is about 25 miles from the Nodena oil field, in the lower Rio Grande border region. Scores of other ranch leases of possible oil rights have been entered into during the last few weeks.

Building Figures Show Continued Improvement.

Washington, D. C., May 3—[Special]—Contracts let in March show that building and construction works are getting under way in spite of the talk of high prices. The March, 1919, record is better than the March record of any year since 1911, except 1917, when Government orders made the record abnormal, this comparison being the result of the study of building and construction conditions as just made by the Department of Labor. Nearly a billion dollars' worth of projects are known to be contemplated, and it is confidently predicted that 1919 will prove to be one of the greatest years in American history for building and construction work.

\$1,000,000 Sales Corporation for San Antonio.

A million-dollar corporation, known as the Walthall Company, has been chartered, with headquarters in San Antonio, Tex., to conduct a State-wide business in the combined sales of automobiles and musical instruments. Financing of the new corporation is largely local, but Eastern capital will go into the business later. Branch offices will be established in Fort Worth, Houston, El Paso and other Texas cities.

Tennessee and West Virginia Increase Ganister Production in 1918.

The production of ganister in 1918 in Illinois, South Dakota, Tennessee and West Virginia increased in both quantity and value, according to statistics compiled under the direction of G. F. Loughlin of the United States Geological Survey, Department of the Interior, and that of Alabama and New York decreased. Minnesota, for the first time, reported the sale of blocks for furnace and converter linings from the quarries at Sandstone, Pine county. The material quarried near Rock Run, Cherokee county, Alabama, was used in the manufacture of fire-brick. Illinois produced a cherty rock, locally called "novaculite," in Elco and Tamms, Alexandria county, which was used in the manufacture of silica brick. The product of Maryland came from the vicinity of Cresapton, Allegany county, and was used in the manufacture of ferro-silicon. The quarry at Bloomington, Garrett county, was idle in 1918. In New York ganister was quarried near Johnstown, Fulton county, and was used in the manufacture of ferro-silicon. The product of South Dakota was quarried near Sioux Falls, Minnehaha county, and was used about equally in the manufacture of silica brick and ferro-silicon, though a quantity of cut jasper was sold for furnace and converter linings. Tennessee produced a small quantity of ganister in the neighborhood of Alton Park, Hamilton county, which was used for furnace lining. West Virginia more than tripled its production in 1918, and the value of its product was nearly six times as much as in 1917. It was quarried at Great Cacapon and Berkeley Springs, Morgan county, and was used in the manufacture of silica brick and ferro-silicon.

Cannel Coal in Texas.

What is possibly the largest body of cannel coal in the United States, if not in the world, lies on the Rio Grande, about 25 miles from Laredo, Tex. The outcrop of this coal can be traced for many miles in the bluffs along the river in Webb county to a point at which it swings northward into Uvalde county. The coal has been mined for many years at Santo Tomas and more recently at Darwin, or Cannel, and Dolores. It occurs in two principal beds, about 90 feet apart, both of which are being mined. The beds range in thickness from about two feet to two feet six inches, and are fairly persistent. For many years they have supplied a large part of the coal used on the railroads in Southern Texas and the adjacent part of Mexico.

This coal is of geologic interest because, although it lies in rocks which elsewhere in Texas contain only lignite, it is a bituminous coal. It has the qualities of a cannel coal; it contains a large amount of volatile matter, or gas, and it yields oil by distillation—about 50 gallons of oil to the ton of coal. It contains more nitrogen than any other coal in the United States.

At most places the roof of the coal is poor and requires considerable timbering, and as no trees grow in Webb county, this requirement adds considerably to the cost of mining. At each of the mines in this district there is a huge dump of clay, either removed in mining the coal or derived from the shale that forms the roof. This clay may be of value for making brick or other clay products.

The coal of this field is described in a bulletin entitled "The Santo Tomas Cannel Coal, Webb County, Texas," by George H. Ashley, issued by the United States Geological Survey, Department of the Interior, as Bulletin 691-L. This bulletin can be obtained free on application to the Director, United States Geological Survey, Washington, D. C.

Concrete Dry Dock Costing \$1,500,000.

Plans have been prepared for the dry dock of concrete construction which the Navy Department will build at the Charleston (S. C.) Navy-yard, the preliminary appropriation being \$1,500,000 and an ultimate expenditure of \$4,000,000 being proposed. This dock will be 1030 feet long, with a width of 110 feet at the bottom and 127 feet at the top. From the cellar dock to mean high water the distance will be 43½ feet, which is sufficient space to accommodate any ship. Construction bids will be received until May 19 by the Bureau of Yards and Docks, Navy Department, Washington, D. C.

Propose to Build World's Largest Gypsum Plant.

Alamogordo, N. M., May 1—[Special.]—It is announced by E. W. Hartman, vice-president and general manager of the Universal Gypsum Corporation of Alamogordo and Buffalo, N. Y., that that company has adopted plans for the construction of the largest gypsum manufacturing plant in the world. It will be located either at Alamogordo or Valmont, N. M., he said.

"We shall employ more than 1000 men," Mr. Hartman continued. "We are fortunate in having the largest deposit of white sand in the world in the Tularosa Basin. We estimate there are more than 10,000,000,000 tons of the gypsum in the white sands which we control. The deposit is 85 feet deep and 45 square miles in area. We expect to construct a railroad from the deposit to our plant on the El Paso & Southwestern road, either at Valmont or Alamogordo, depending on which place seems most suitable.

"The engineers now are preparing the plans for the factory, but these plans will be held in abeyance until we sink two deep test wells for oil. We want to know whether we shall use oil, gas or coal, and, of course, the use of fuel is the first item of importance in the success of the enterprise. We have plenty of coal near, but the test wells will show whether we have oil and gas, and since eight geologists have informed us we have the best chance for striking oil in great quantities, we have made an appropriation of \$100,000 to take care of the expense of drilling to deep wells."

The articles to be manufactured from the sand are terra-cotta, plaster boards, plaster paris, fireproof tile, building blocks and other building materials.

Twenty to Thirty Per Cent. Increase in Southern Wheat Acreage.

Washington, D. C., May 3—[Special.]—A winter wheat crop which is estimated to run close to 900,000,000 bushels, an increase of nearly 33 per cent. over the record-breaking crop of 1914, and an acreage never before equaled, is forecast in a report on the condition of winter wheat issued by the Chamber of Commerce of the United States through its committee on statistics and standards.

"About 25 per cent. of the yield," the record adds, "will be south of Mason and Dixon's line, for winter wheat is being grown now in some of the Southern States where it was never grown before."

The report indicates that spring wheat is delayed by continued rains, with the result that in some of the Northern latitudes the seeding time was delayed from 10 days to two weeks. "In the Southern sections," the report adds, "the increase in acreage over last year ranges from 20 to 30 per cent."

Continued Improvement at Freeport Sulphur Mines.

Freeport, Tex., May 2—[Special.]—When the dredging and other improvements now under way are finished, Freeport's importance as a deep-water port will be greatly enhanced. While the main purpose of dredging the channel at the mouth of the Brazos River so as to obtain a depth of 22 feet of water is to afford passage for larger boats engaged in transporting the sulphur from the deep wells of the Freeport Sulphur Co., it is expected that a large volume of general freight traffic will be quickly developed. The Freeport Sulphur Co. is also building a large wharf and dock system here for public use. It is operating six sulphur-producing wells. The product as it comes from the subterranean beds is 99.97 per cent. pure. The company is putting down test wells upon another sulphur dome near here, where it plans to install a large sulphur-mining plant.

Macon County Co-operates in Marketing Peanuts.

Auburn, Ala., May 5—[Special.]—A carload of White Spanish peanuts was marketed recently from Tuskegee by 15 or 20 farmers co-operating in the sale. The purchase was made by the Southern Cotton Oil Co. of Montgomery at \$120 per ton and brought \$1944 f. o. b. cars. The peanuts graded No. 1, and will probably be used for seed purposes this fall.

NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore we often publish letters with which we do not agree.—Editor Manufacturers Record.]

In Defense of Cotton.

B. E. LENNARD, Jacksonville, Fla.

I wish to thank you and to congratulate you for the masterly way you took the South's defense on the cotton question with the Governor of Kansas. In view of the fact that Kansas has profited so much by the war in increased prices of breadstuffs, it does seem to me that Governor Allen should have been the last man to throw a stone.

I am impressed with the idea that America should work with all its might to become independent of other countries in both business and politics. We here in the South should build cotton factories and manufacture every bale of cotton we grow. In this way only can we hope to stabilize the price of cotton so that the business of growing cotton will be a profitable one. Unquestionably the low levels in cotton prices in 1914 were due entirely to our inability to find a market for the crop we had on hand; therefore, if we are to become independent of such conditions, we must build factories so that the farmer may get what he deserves and that labor may find employment.

Build a factory in every county in every cotton-growing State, and the question will be settled; also all of the surplus labor will find profitable employment. The children of the poor farmer will get an education, and when they reach manhood they will stick to the farm and we will have no "back-to-the-farm" movement.

Lower Prices on Stone not Probable.

R. M. RICHTER, Secretary Bedford Stone Club, Bedford, Ind.

We are wondering where the reports originate that lower prices of stone, both in the rough and finished state, will prevail shortly.

Such a result is so remote that it may well be considered altogether improbable. Several factors combine to create a condition where the present level of quotations is certain to be maintained. For example, in the Indiana limestone district a general advance in wages became effective in the forepart of April. This advance will average well over 10 per cent. for all labor, both skilled and unskilled. The price of coal is still high, so is the price of steel, sand, belting and practically everything else that enters into the cost of production. While in some of these articles there has been a slight recession from war quotations, the figures today are far ahead of anything existing before the war.

Furthermore, there must be contended with the grave problem of taking care of legitimate overhead out of a much curtailed volume of output. Overhead goes on sure as death and taxes, day and night. With perhaps 10 per cent. of normal, by way of stone shipments, it stands to reason that that 10 per cent. must be looked to to carry overhead, which would naturally be much less per cubic foot on say 75 per cent. of normal business.

Nor must we overlook the fact that stone for years has not commanded a proper figure. It has hurt itself by cheapening itself through the ridiculously low quotations which were prevalent even before the war. Believe it is a fact in the whole natural stone industry, including granite, marble, sandstone and limestone, that practically no money was made subsequent to 1912.

Present-day prices of Indiana limestone are far from sufficient to pay operating and overhead charges, so that even at today's prices the producer is actually losing money. He continues to operate and persistently seeks markets, however, in the hope that the demand shortly will justify his present activities and his faith in the future.

One positive criterion proving our claim that prices will not and cannot come down is that repeatedly in recent competitive building operations the bids for substitutes for natural stone were actually higher than those of natural stone.

Cheap Cotton Makes Low Wages and Low Wages Are a Curse to Any Section.

M. EUGENE STREET, M.D., Glendon, N. C.

I have read the MANUFACTURERS RECORD so many years without finding anything to kick about that I don't want it to be thought that I am kicking now. And what I have to say about your leading editorial of March 27, "What Has Made California Rich Can Make the South Still Richer," is merely a supplementary fact to what was said in the editorial.

I will quote from a paper I contributed to the News and Observer. "The South's climate should be a great asset to it, but as it is, its climate cannot be capitalized on account of the fact that a man can get only half as much for his work in the South as he can in the balance of the country.

"California, with a climate no better than a vast area of the South, has made wonderful progress. Why is this? It is because California has a wage scale equal to the balance of the country, and on this account has been able to capitalize her climate. California could offer equal advantages and a mild climate to boot. The South can offer the mild climate all right, but it can offer a man only half as much for his work as he can get in the North and the West. Have you ever wondered why people from everywhere flock to far-away California? It is because a great many people want a mild climate, and California is the only place in the United States where they can get a mild climate and at the same time get as much for their work as they can in any other part of the country.

"When the South raises its wage scale to a level of that of the balance of the country it can capitalize its climate and get the same results that California has gotten. It can never do this before."

I want to refer you to my letter in the MANUFACTURERS RECORD, March 20, page 98f.

All of the Southern States show a far lower per capita bank deposit than the Northern and Western States. The bank deposit is the best index of what a people are getting for their work.

The very greatest constructive work that the South can engage in is that of raising its wage scale up to a level of that of the balance of the country.

No one is going to voluntarily raise wages to do this. And any man would be foolish to try to do it that way.

The only possible way to raise the South's wage scale is to make the cheap child and woman labor, that is such a large factor in cotton production, unavailable for this purpose. The only possible way this cheap labor can be made unavailable is to give the ballot to women. Then, and not till then, the South will have school terms of sufficient length and a compulsory law that will compel the attendance of all the children, both white and black. Nothing short of this will answer. And then, and not till then, a wage scale for women equal to that paid men for the same work will be enforced by law. Nothing short of these two things will answer the purpose intended. And these two things will be done when the women vote. They will not be done before.

Women suffrage is not a question of sentiment. It is a question of sound, common-sense business. To the South it is an absolute business necessity.

For more than a generation the wage scale of the cotton States has been only about half that in the balance of the country. This means that the South has gotten, during all this time, only half pay for its labor for producing all of the vast amount of raw materials that it has shipped out, including cotton and lumber, etc. Just what the amount of this unnecessary loss in dollars aggregates I will leave to the expert statistical ability of the editor of the MANUFACTURERS RECORD to compute. It strikes me that it is so large a sum of money that it would be sufficient to more than pay the cost in money that the war with Germany has been to the United States. God only can ever know

what has been the loss on account of the non-mental, physical and spiritual development of millions and millions of the South's population, so I would not ask even Mr. Edmonds to tell us what has been the loss on this account. All that we can do is to look at what the cotton States are today and then look at an equal area in the North of the same age of the cotton States, and make a comparison.

I am at work on a book, which I hope to have out soon, to present this whole matter to the Southern people in such a way that they will read it and realize what a burden to the South its low wage scale is, and what an expense and a drawback it is to the South, and make them see the necessity of remedying it without any unnecessary delay.

The South has everything that California has to make it rich, except the wage scale. And when the South raises its wage scale up to a level of that of the balance of the country, so that the South will be getting full pay for its work, instead of half pay, as has so long been the case, the South will double its bank deposit and begin to develop its resources and capitalize its climate and advertise, and will then progress in such a way that the balance of the country will sit up and take notice. And the balance of the country will realize, when the wage scale of the South is as high as that of the balance of the country, that the South is the sure enough land of opportunity, and people from everywhere will flock to the South by the scores of thousands, and the development and the wealth of the South will be the talk and the wonder of the world, even more so than that of California has ever been.

The Appreciation of a Negro Minister for Some Words of Cheer.

REV. P. COLFAX RAMEAU, Birmingham, Ala.

When I say that I am very grateful to your honor for publishing my article, it is only a mild way of expressing my heartfelt thanks, and more so for the way by which you gave expression to the same. For it is a fact that one of the South's great assets is my race.

Again, this terrible world war has opened new industrial gates for my people, not only in this old Land of Dixie, but throughout this republic.

I am sure your honor is cognizant of the fact that as soon as the peace treaty is signed and ships begin to ply the mighty Atlantic there are millions of aliens who will return to their native homes, which will bring about a shortage of labor never felt before in the history of this country, and their places to a great extent must and will be filled by my people.

If the South will deal justly with itself, it will become solid in more than a political sense. It must become solid in a social sense (not from a standpoint of society), but in social uplift. In a broader sense, I mean that whatever affects the social welfare of the highest Anglo-Saxon in any section of Dixie affects the humblest negro also. And the South must learn that in some mysterious way we are bound together by a common relation of a holy tradition of the past, and the white man, because of his experience and intellectual development, must lead in guarding the health, the ideals and our Christian civilization.

Honorable Sir, you must pardon me for writing you such a lengthy letter, but my heart is filled with gratitude for your comment, and I know what it will mean to a struggling people trying to make it to the top of the hill with all kinds of weights attached to them. Again I thank you, and pray God's blessings upon you and your great work.

Additional First-Class Hotel Wanted.

MARK FENTON, Industrial Commissioner, Memphis Chamber of Commerce, Memphis, Tenn.

We are desirous of getting in communication with someone who would be interested in establishing a first-class hotel in this city, and we would like to know if you can give us any information as to parties who might be interested.

There is a strong demand here for an additional hotel of this character, and we will be pleased to furnish detailed information to the right parties.

A Farmer Is Certainly a Skilled Laborer and Entitled to as Much Pay.

L. H. PARTRIDGE, Lake City, Fla.

In none of the discussions of the necessity of maintaining a fair price for cotton have I seen any statement of the length of time one must devote to learning how to raise this crop to get best results with it. If a man who knows nothing of farming learns cotton raising in four years, he will have done well. A carpenter learns his trade in two or three years and gets \$3.50 to \$5 a day; a blacksmith, \$4 to \$6.50, and a machinist, with three or four years' training, \$4 to \$8. These men have from \$50 to \$200 invested in tools and a one-horse farmer \$300 or more.

The farmer is a skilled workman, and whether he raises cotton or other crops is entitled to a wage equal to that of a mechanic who has spent no more, and frequently less, time in learning his trade. The fact that the farmer has, at least in the South, always made less does not change the right of the matter. A fair price for cotton is the only means by which thousands of Southern farmers can secure an income sufficient to properly support and educate their children. You have my best wishes in your efforts to secure this end.

The North Carolina State Buildings.

R. R. CLARK, Secretary State Hospitals Board, Statesville, N. C.

The statements in your issue of April 24, under a Raleigh (N. C.) date line, contain so many errors that I deem a correction advisable. The joint board to which reference was made, and of which Mr. Jos. G. Brown of Raleigh is chairman and the undersigned secretary, was organized by the Legislature of 1917, when the three hospitals for the insane in this State—the Central Hospital at Raleigh, the Western Hospital at Morganton and the Eastern Hospital (for negroes) at Goldsboro—were put under a joint board of nine instead of separate boards of nine each. The Legislature this year added to this board the Caswell Training School for Feeble-Minded at Kinston, and increased the membership of the board from 9 to 12. So it will be observed that this joint board controls four State institutions, not "over a score," as your correspondent stated. Each institution is under the direct control of an executive committee of three, as the joint board meets but twice a year.

Some buildings will be erected at the Caswell Training School this year. Dr. C. B. McNairy, Kinston, is superintendent, and Mr. D. F. Wooten, Kinston, is chairman of the executive committee, also one or more buildings will be erected at the Central Hospital, Raleigh; Dr. Albert Anderson is superintendent, and Mr. Jos. G. Brown, Raleigh, chairman of the executive committee. Some building is also in contemplation at the State Hospital at Morganton. Dr. John McCampbell, Morganton, is superintendent, and Mr. A. E. Tate, High Point, is chairman of the executive committee.

Bonham Board of Trade Active in Construction Work.

C. R. INGLISH, Secretary Bonham Board of Trade, Bonham, Tex.

The Board of Trade of this city has financed two more corporations since my report concerning the Potato Curing Plant organized here with a capitalization of \$20,000, which was subscribed in less than 10 minutes.

The Board of Trade appointed a committee of leading citizens to get up funds for a compress, and the money is up. The committee is now ready to receive bids from somebody with a good second-hand press for sale.

The Board of Trade also put out a committee to secure funds to build a natatorium. The money is up, and the natatorium is the next thing in order. The Board of Trade wants to hear from somebody who wants to erect an apartment-house here, close-in. People are leaving here because there is no place to stay—no vacant houses.

The Board of Trade wants to hear from any legitimate proposition, where mutual advancement for Bonham and investor figure.

The Situation as Seen by a Wall Street Man.

WALTER B. SEYMOUR, 66 Broadway, New York.

The present slackening in the demand for labor is an item, and a big one, in the law of readjustment.

To prevent disaster and relieve the situation, put all idle men at work.

To put men at work is the duty of our municipalities, our industries, establishments, our planters and our farmers.

If work is not found for the idle, the handwriting on the wall shall blot out the word liberty and splash in place thereof in letters of red, Bolshevism, anarchy, I. W. W.—all synonyms of destruction.

If work is not found, the day will come when a multitude, none of whom with half a breakfast, will chose our Congress.

On one side the statesmen preaching patience, respect for vested rights and strict observance of public faith.

On the other side the Bolshevik ranting of the tyranny of the successful and the rich.

Then will come the period of spoliation, the devouring of the seed wheat and corn, the destruction of the wool, the trampling down of the cotton fields and the truck farms.

Then shall stalk the monster famine.

We are looking at matters through wrong angles, through a wrong perspective.

Our cotton planters are threatening to restrict the planting of the usual cotton acreage, to raise the price of that commodity. The price of cotton is at the minimum, and when Europe enters the field as a buyer, cotton will sell at 50 cents, and woe be to the Southern planter that has none of it.

Our manufacturers, builders and contractors are floundering in a sea of doubt, hesitating, some trying to beat the natural laws of readjustment; trying to force down the price of materials and the wages of labor, overlooking the fact that materials and labor and food are at the minimum and will go no lower. Disaster faces the municipality and manufacturer that will not buy and will not build.

Our Congress is idle, letting our railroads drift into insolvency and bankruptcy. Our Chief Executive is passing away his time at the Peace Table trying to establish a League of Nations to keep the peace rather than establishing a peace that the League of Nations might keep.

We have issued to its full our quota of money, our Liberty Bonds and our Certificates of Indebtedness to take up the new Victory Loan.

Business is hesitating, industries and general business are slowing down. As business halts banks become overcrowded with money: abundant money with slow business means wild speculations in securities and commodities.

To check this, put all men at work: use up the money abundance: make up the four-year deficiency in home building and make the necessary municipal improvements.

Stocks should return from an inflated value in five years. Bonds should reach record prices—figures probably higher than for 20-year period. Money supply will contract with extinguishment of Liberty loans.

Senator Dial for Wide Distribution of Vessels.

N. B. DIAL, United States Senator from South Carolina.
Laurens, S. C.

I am very much interested in the disposition our Government should make of our ships, and would be glad to have your advice and co-operation. It would afford me very great pleasure to see the ownership of vessels distributed amongst many more citizens of the United States. All good people did what they could to win the war, and if vessels are to be sold for less than their value, all should have an opportunity of getting some benefit therefrom. I would, therefore, suggest that a wide advertisement be made and let chambers of commerce, boards of trade, cotton exporting companies, cotton mills, cattle interest, grain interest, and, in fact, everybody who has anything to export or import, look further into the question of buying ships.

If more people become interested we could develop more ports and relieve congestion, at the same time avoid strikes, labor troubles, etc. Furthermore, it would be easier to change or amend our antiquated shipping laws if there were more stock-

holders. If this were the case the members of Congress would take a deeper interest where their constituents were directly interested. We are now laying the foundation for our future prosperity, and it occurs to me shipping should not be acquired by monopolists. I would be glad for you to consider these suggestions and give them whatever weight and publicity you think entitled to.

Tin in Alabama.

STEWART J. LLOYD, Department of Chemistry and Chemical Engineering, University of Alabama.

Combing of the United States for mineral deposits during the war does not seem to have resulted in any material finds of tin ore-bodies, and North America still retains the unenviable distinction of being the only "tinless" continent. China in Asia, New South Wales in Australasia, the East Indies, Nigeria and Swaziland in Africa, Bolivia in South America, and Cornwall all contribute substantial amounts to the world's tin supply, while North America imports a thousand tons of tin or ore for every one that she produces. That our record in platinum production, and in nickel so far as the United States is concerned, is quite as bad does not make matters any better, and although the exploration of what deposits of tin we do possess has not led to promising results, there is every reason why all known occurrences of tin minerals should be followed up and the exact size and value of the deposits brought to light. The present note is intended to call attention to an occurrence of tin ore which does not seem to have been investigated with the thoroughness it deserves.

Coosa county in central Alabama is underlain by crystalline rocks which have, hitherto at least, been regarded as pre-Cambrian. They comprise slates, quartz-mica schists, gneisses and granites, with numerous pegmatitic dikes. Cassiterite has been found associated with such dikes at three localities in this county, about a mile and a half west of Rockford, the county seat (Sec. 14, T. 22, R. 18), near Manning P. O. to the north east, and north of Manning near Hollins, in Clay county. A distance of 20 miles separates the first and last occurrence. Tourmaline and tantalite accompany the tin in the first of these localities, the tantalite carrying, upon analysis, a small percentage of tin. Other localities in Coosa county are reputed to have yielded tin, notably Sec. 24, T. 22, R. 16, while in Clay county to the northeast a small reduction plant was once operated near Ashland. An account of these occurrences may be found in Bull. 3, page 28, of the Geological Survey of Alabama, and in Bull. 290, page 164, of the U. S. G. S., while the analysis of the tantalite referred to is given in Trans. Am. Inst. Min. Eng. 1884, Vol. 12, page 161.

No serious prospecting for tin has been done in any part of this area, nor has any interest been taken in its discovery since the '80s. That any large ore-bodies would be found even by detailed search is perhaps unlikely, but something more than the perfunctory examination made hitherto is certainly warranted. The Alabama graphite belt, which produces more graphite than any other single district in the United States lies just to the west and north, and affords an excellent example of the results to be expected from high prices for a mineral and from intelligent prospecting. Five years ago there were only three producing mines in the whole district; when the armistice was signed there were over twenty-five.

Water-Power Site Wanted.

THE ANDREW TELLER COMPANY, Investment Securities,
Cleveland, O.

We are looking for a water-power site, either undeveloped or partially developed, that with proper investment 5000 horsepower could be generated.

Any information you may give us as to any such possible location may result in our mutual profit. This power must be located either in the East or South.

To Cut 17,000-Acre Tract.

A \$500,000 corporation will be organized to cut a 17,000-acre tract of virgin timber land in Logan county, West Virginia, where a mill with dwellings and commissary will be built. D. E. Hewitt and E. K. Mahan of Huntington, W. Va., are among the organizers.

TWO NEW VESSELS LAUNCHED AT PASCAGOULA.

Pascagoula, Miss., May 2—[Special.]—On April 19 the steamship Berela, built by the Diers-Blodgett Shipbuilding Co. for the Emergency Fleet Corporation, left Pascagoula for Mobile, Ala., and the accompanying photograph shows this vessel as she is passing through the Louisville & Nashville Railroad bridge going down the Pascagoula River to sea.

The International Shipbuilding Co. launched from ways No. 1 on April 21 the new ship City of Biloxi, a wooden vessel of 3000 tons, which will be equipped with 300 horse-power auxiliary



STEAMSHIP BERELA LEAVING PASCAGOULA FOR MOBILE, ALA.



LAUNCHING OF CITY OF BILOXI AT PASCAGOULA, MISS.

crude oil burning engines. This is the second ship launched by this company. The first, from ways No. 2, was the City of Pascagoula, an account of which has already appeared in the MANUFACTURERS RECORD. Two more wooden ships, Nos. 3 and 4, are rapidly approaching completion, and it is expected that they will be ready for launching within a few weeks.

The accompanying photograph shows the City of Biloxi just as she is touching the water. The vessel is so named because Biloxi is the residence of Mr. Henry Piaggio, president of the International Shipbuilding Co.

Livestock Commissioner to South America.

Washington, D. C., May 6—[Special.]—The Bureau of Markets, United States Department of Agriculture, has perfected plans to investigate in South America the possibilities for purebred stock from the United States, and to stimulate interest in importations from this country. David Harrell of Austin, Tex., who until recently was representative of the War Trade Board in Spain, has been appointed as livestock commissioner to perform this work. He plans to sail about the middle of June, and will be accompanied by H. P. Morgan of the Bureau of Markets as an assistant.

Large Tonnage Vessels from Mobile Shipyards.

Mobile, Ala., May 1—[Special.]—Mobile's greatest industry will soon be putting out ships of major tonnage. The Chickasaw Shipbuilding Co., subsidiary of the United States Steel Corpora-

tion, has laid keels for two fabricated steel ships of 9600 tons each, and ways are now being constructed for two more keels.

The Chickasaw company has practically completed its original task of building a city, Chickasaw supplying every comfort to its officials and employes. Eleven hundred and fifty houses have been constructed; 250 more only remain to be built.

It is known that it is ultimately planned to have a population of about 22,000 for Chickasaw. At present there are about 7000 people there.

Important among the late buildings practically ready for use is that of the power house of the company. Like the other plants at Chickasaw, the power house was constructed on the unit plan. Every unit of the Chickasaw industry can be enlarged without having to touch present structures. It will be found that Chickasaw will not in the future have to overcome the handicap in crowded buildings that many major industries of the United States have suffered. The town has been built with every facility for making it larger.

The fabricated vessels being turned out by Chickasaw are not for any particular corporation or the Government. First the ships are to be built. Their disposition later, it is understood, is a matter that is not troubling the corporation's officials.

PUMPKIN INDUSTRY NOW OF REAL IMPORTANCE.

Houma, La., May 2—[Special.]—More pumpkins are produced in Terrebonne parish than in any other similar area in the United States. Two years ago the pumpkin crop was a negligible quantity in the list of agricultural products of the parish. In 1917 the Houma canning factory gave notice to the farmers that it would can pumpkins. The farmers responded and the producers and the factory found it a profitable business.

During the past year the factory packed 4,000,000 one-pound cans of pumpkins, or enough material to make 8,000,000 pumpkin pies, allowing a half pound for each pie.

The factory established a market price of \$5 per ton for the



BARGE LOAD OF PUMPKINS BEING TRANSPORTED FROM FARMS IN TERREBONNE PARISH TO CANNING FACTORY AT HOUMA, LA.

pumpkins. An acre of land will yield from 10 to 15 tons of pumpkins, thus bringing the farmers a revenue of from \$50 to \$75 per acre.

The pumpkins are planted among the corn as the cultivation of the corn crop is finished. They require no further cultivation in the alluvial soil of this section, with the result that the farmers are enabled to grow two crops on the same land with the same labor.

Terrebonne parish has a network of waterways, and the pumpkins are transported to the canning factory in barges. The barges pick up the pumpkins at landings on the farms and unload them at the factory door.

Dr. L. H. Jastremski, manager of the canning factory at Houma, says the canned pumpkins are shipped all over the world, and that the demand appears to be unlimited.

"We have a ready sale for all of the pumpkins we can pack," Dr. Jastremski said, "and we have developed the product, our market and our source of supply within two years."

Pumpkins are classed as high-grade food for livestock, and many of the farmers in this section have found it profitable to grow pumpkins for the purpose of fattening cattle and hogs.

Texas Commercial Bodies Work Through Central Organization.

Dallas, Tex., May 3—[Special.]—Membership in the Texas Chamber of Commerce has been taken out by practically every local chamber of commerce in the State. Twelve of the largest industrial, commercial, financial and agricultural associations are affiliated with the organization, management and operation of the institution. A member of each association serves as its representative on the directorate of the State Chamber.

Owing to its great physical size and diversity of interests, Texas is today suffering from lack of concerted, centralized effort in channels thoroughly representative of the entire State. It is for the purpose of bringing these interests together in a definite, constructive plan of action that the Texas Chamber of Commerce was brought into being.

It has divided the State into 15 divisions. A large trading center in each division has been selected as district headquarters, dealing directly with the interests contiguous by means of a district supervisor. Twelve at-large directors represent the State as a whole.

Specific services will be rendered the membership of the State Chamber through the medium of departments created and forming the general organization. The following departments are included in the working plan: Civic, publicity and conventions, agricultural, industrial, research, transportation, homeseekers and visitors, markets and distribution and executive.

Especial emphasis will be placed upon the agricultural development of the State, and the development of a better highway system. Owing to its proximity to the Latin-American countries, Texas looks forward to a large share of the trade between the United States and the Republics to the south. A commercial agent to represent Texas interests will be stationed in Mexico City to handle the details of the already valuable trade now being carried on between this State and the neighboring republic.

Officers of the State-wide Chamber elected at the meeting last month are: George W. Armstrong, president, Fort Worth, president George W. Armstrong & Co., Inc.; J. S. Cullinan, vice-president, Houston, president Galena Signal Oil Co.; M. H. Wolfe, vice-president, Dallas, cotton exporter; James Z. George, vice-president and general manager, Houston; John F. Shelton, Fort Worth, secretary to the board, Texas Anchor Fence Co., E. J. Gannon, Dallas, treasurer, American Exchange National Bank. John V. Hughes, Dallas, was elected chairman of the executive committee of the organization.

Encouragement for Capital and Enterprise.

Washington, D. C., May 3—[Special.]—John Skelton Williams, Comptroller of the Currency, said today:

"Nothing could demonstrate more strongly the solid foundation upon which our banking and currency structure now stands and the improved manner in which the national banks of the country are being operated and safeguarded than the record they have made in the past 16 months, embracing 10 months of the stress and trial of war and 6 months of the dislocation and strain of reconstruction.

"The official reports show that today there are more national banks in operation with larger capital and surplus and greater resources, making bigger dividends and with a more striking immunity from failure than ever before in our history. A knowledge of these facts must necessarily give inspiration and fresh courage to all business men, for our economic history shows that every commercial panic and business prostration in the past has been precipitated by financial disorders and banking crises.

"Assured of healthy banking conditions and an abundance of money and credit to meet all natural and legitimate requirements, the commercial, agricultural and industrial enterprises throughout our entire country can proceed with their plans for the present and the future with unprecedented confidence and assurance.

"In the four months ended April 30, 1919, there was only one national bank failure in the entire country—a small bank with \$25,000 capital—and in the sixteen-month period from January 1, 1918, to May 1, 1919, there have been only two national bank failures in the entire country—an average of one each eight months."

Protective Legislation Urged for Sheep Production.

Philadelphia, Pa., May 1—[Special.]—The national sheep conference, which closed its two-day session here yesterday, adopted resolutions urging that the Bureau of Standards provide tests for wool fabrics in order to protect the public against misrepresentation. Eighty per cent. of the raw material used in so-called "all-wool" clothing was declared to be devitalized waste which has been reworked. Sheep men want their industry protected against the practice of selling shoddy to the retail trade without labeling it for what it is.

The primary purpose of the conference was to promote the wider production of sheep with a consequent increase in the production of wool. Constructive resolutions passed included recommendations for adequate Federal and State appropriations for educational work, community breeding of sheep, support by business and commercial interests for agricultural uplift movements, facilities for the handling of wools through co-operative associations, and educational demonstrations in behalf of more general use of mutton as a diet.

Development of 200,000,000 acres of cut-over farm lands of the South as the greatest field for sheep raising was urged by C. S. Ucker, vice-president of the Southern Settlement and Development Organization, and O. H. L. Wernicke of the Pensacola Tar & Turpentine Co.

Steel Industry and Railroad Administration to Hold Another Conference.

Washington, D. C., May 7—[Special.]—The Railroad Administration and the representatives of the steel industry will meet in New York, probably at Judge Gary's office, on Thursday, May 8, when an effort will be made to compose the differences heretofore existing as to prices.

The Industrial Board will not be represented at the conference unless present plans are changed.

The feeling of members of the Industrial Board is that price concessions below the schedule agreed on at the March meeting cannot be expected. It is stated that the cost of production has in the meantime actually advanced, owing to the decrease in the volume of production, on which account it will be impossible for the steel industry to consider lower rates.

On the other hand, it is hoped that some understanding can be reached which will tend to soften the embarrassing situation now existing, with different branches of the Government openly at loggerheads.

There is little expectation that the result of the conference in New York will be such as to permit the carrying out, along original lines, of the program of the Industrial Board, so far as industries other than that of steel are concerned.

\$100,000,000 Public Utility Mortgage.

The stockholders of the Consolidated Gas, Electric Light & Power Co., of Baltimore, have approved the plan to issue not more than \$100,000,000 of first refunding mortgage bonds to provide for future financing. The bonds are to be issued in series, as may from time to time be required to acquire property and equipment, to provide for increasing business and to refund prior obligations, including general mortgage bonds and bonds of constituent companies as these obligations mature. The first series under this new mortgage has been authorized, amounting to \$5,000,000 of 30-year 6 per cents, of which \$3,500,000 will be used to secure in part an issue of \$5,000,000 3½-year 7 per cent. notes, and this, together with the \$1,500,000 reserved, will provide for conversion of the notes when they mature. Each series of bonds to be issued under this first refunding mortgage will bear interest at such rates as may be deemed proper at the time the issue is authorized, the latest possible date of maturity being February 1, 1999. Enough bonds will be reserved to retire par for par all underlying securities and outstanding notes of the company. Provision is made for a sinking fund. The bonds may be issued in either United States or English monetary terms, viz., dollars or pounds.

C. B. Armstrong and associates, Gastonia, N. C., have incorporated the Victory Yarn Mills Co., with \$120,000 capital, for spinning combed cotton yarn.

AMAZING PRODUCTION OF MEXICAN OIL WELLS.

Hundreds of Millions of American and European Capital Invested.

Tampico, Mexico, April 30—[Special.]—One of the outstanding features of the oil industry in Mexico during the year 1918 was the widening of the producing area and the uniform success that was had in bringing in wells of enormous yields. Although the producing potentiality of the several oil fields was increased enormously by the bringing in of only a comparatively few wells, this result is regarded by oil men as serving to still further demonstrate the fact that the available and undeveloped underground supply of crude petroleum in the Gulf coast region of this country is beyond all comprehension. It is shown by a record that has been compiled of the various wells already completed, together with their capacity, that they are capable of giving a daily yield of approximately 1,700,000 barrels, or at the rate of 620,500,000 barrels a year.

Figures showing the total crude petroleum production of Mexico for last year indicate that the yield for the 12 months was approximately 63,000,000 barrels, or about 2,000,000 barrels above what it was during the year 1917. But for the fact that the ocean transportation facilities were very limited on account of the war, and that it was difficult to obtain material for the construction of pipe lines and pumping stations, the production for last year would perhaps have been double or triple what it actually amounted to. No great effort was made to add new wells to the producing area, for the reason that it was well known that such wells as were brought in would have to be capped pending an increase in the transportation and marketing facilities.

In addition to this drawback, the more or less antagonistic attitude of the Carranza Government toward foreign oil interests served to retard exploration and exploitation of the different proved fields and outside territory. The uncertainty as to whether the plans of the Government for imposing heavy land rentals, taxes and other more or less confiscatory laws and regulations upon the oil producers all tended to give the industry a pronounced unstable condition. Despite all these unfavorable elements, the production showed an increase over any preceding year.

The record of the gradual expansion of this industry in Mexico is strikingly shown in the figures giving the yields for each year since production started. These figures are taken from the official reports made to the Mexican Government, and are as follows:

Year 1904, 220,653 barrels; 1905, 320,379 barrels; 1906, 1,097,264 barrels; 1907, 1,717,690 barrels; 1908, 3,481,610 barrels; 1909, 2,488,742 barrels; 1910, 3,332,507 barrels; 1911, 14,051,643 barrels; 1912, 16,558,215 barrels; 1913, 25,902,439 barrels; 1914, 21,188,427 barrels; 1915, 35,500,000 barrels; 1916, 39,801,110 barrels; 1917, 61,000,000 barrels; 1918, 63,000,000 barrels; total, 289,660,979 barrels.

Many steel storage tanks were erected by the different operating companies during the year 1918, but much more would have been done in that direction if the material could have been readily obtained with which to build the tanks.

A new market for Mexican crude oil was opened in South American countries during the year, and exportations to Argentina, Chile and Brazil showed a marked increase over the previous 12 months' period. As has been the case, however, ever since the industry was begun in Mexico, far the greater part of the exportations were destined to the United States, with England second.

During the last few months there has been a renewal of activity in the matter of obtaining oil leases from landowners in the region bordering the Gulf between Tampico and Matamoros. In most instances the men who have taken these leases are American investors, usually representing large oil-operating interests. Whether or not these holdings will be exploited soon depends altogether upon the future attitude of the Mexican Government towards the industry, it is stated.

Of the several wells of enormous potential yield that are located in the different fields of the Tampico region, that of the Huasteca Petroleum Co., subsidiary of the Mexican Petroleum Co. at Cerro Azul, continues to hold the world record in the matter of actual available daily capacity. This well was brought in on February 10, 1916. On February 15 of that year it showed by actual test

to have a daily output of 152,000 barrels. This was increased to 269,858 barrels a day by February 19, or five days after the original test. It was then throttled down to a flow of 30,000 barrels a day, and since then it has given that quantity of pipe line run each day without a moment's cessation, its contribution to the production of Mexico having been approximately 32,000,000 barrels, with no indication of any early decrease in the daily quantity that it gives forth.

It was in September, 1910, that the Mexican Petroleum Co. brought in a well in the Juan Casiano field. It showed on a test that it was capable of giving a daily yield of something more than 100,000 barrels of oil. Pipe line connection was made, however, but not until more than 1,500,000 barrels of the inflammable product had been burned in order to prevent it from flowing into Lake Tamiahua, thus endangering boats and other property. It was throttled down to a flow of 20,000 barrels a day, and for more than eight years it has been giving this yield. It has yielded up to this time more than 65,000,000 barrels of crude petroleum. Accompanying the oil is a gas pressure of 265 pounds per square inch. This natural gas is piped to the top of a hill a mile and a half distant from the well, and is there burned in 12 great flares day and night, lighting up the country for a long way around.

Several additions to the larger producing companies were made during the year. More than 25 American and British corporations made a record of each obtaining a yield of more than 100,000 barrels of crude petroleum. Practically every large oil operator in the United States is now interested in the Mexican fields. It is estimated that there is approximately \$350,000,000 of American and British capital invested in oil properties, including lands, leases, wells, pipe lines and refineries, in Mexico. Of this amount, approximately \$250,000,000 is American money. There are also many millions of dollars of Dutch capital now operating in Mexican fields. The amount of these investments does not by any means represent the value of the properties that are now held by foreign interests. Land for which only a few dollars an acre were paid is valued at many thousands of dollars per acre as a result of oil development operations. The same is true as to leases. As a result of the great influx of foreign money and men, Tampico is no longer typically Mexican. The city and the country for many miles along the coast and back into the interior have been completely Americanized during the last several years.

If the prospective additions to the fleets of oil-carrying vessels are made and additional pipe lines constructed, the oil industry of Mexico during the present year will show an increase far above what it was in any previous year. Of course, this growth of the business will depend largely upon the attitude of the Mexican Government toward the industry. It is expected, however, that the American, British and other foreign governments will not permit further serious handicaps being placed in the way of these oil investments.

Extensive Irrigation System Will Reclaim 200,000 Acres.

Matamoras, Mexico, April 30—[Special.]—Authoritative announcement is made that the Compania Irrigadora de Rio Bravo, which during the latter years of the administration of the late President Porfirio Diaz began construction of a system of irrigation that had for its immediate purpose the reclaiming of 200,000 acres of land situated on the Mexico side of the Rio Grande, has been reorganized and will resume the work of carrying out its original plans. It is stated that Eleuterio Avila, president of the company, who is now in New York, has succeeded in financing the big project. At the time the revolutionary troubles forced a cessation of the construction of the irrigation system, considerable progress had been made in building a dam across the San Juan River, near the point where it empties into the Rio Grande. This dam will now be finished and the canal that is to carry the water through a long stretch of valley land will be built. The company owns the famous Sautena ranch or hacienda, which embraces about 2,000,000 acres of land. Most of this tract can be irrigated from the San Juan and Rio Grande. It is planned to devote a large acreage to growing sugar-cane, which has proved a highly profitable crop on the American side of the boundary stream. The San Juan River, from which the company will obtain its initial water supply, is the principal tributary of the Rio Grande. It is the source of most of the floodwaters that periodically inundate large areas of the cultivated valley in the region above Brownsville.

Favorable Legislation Not Expected for Foreign Oil Investments in Mexico.

Monterey, Mexico, May 2—[Special.]—American and other foreign oil investors in Mexico will obtain no favorable legislation at the hands of the Mexican Congress which convened in the capital on May 1. This is the expressed belief of men who are in close touch with the Carranza administration and the sentiment that exists in official circles. Widespread propaganda is now being circulated in Mexico with the view to justifying the Government's attitude toward the oil industry. Emeterio de la Garza, Jr., a distinguished lawyer of the City of Mexico, who in former times was attorney for large foreign oil interests in this country, is now openly supporting the program of Carranza of increasing the taxes on the industry. In a public statement just issued Mr. Garza says:

"The laws governing and taxing the oil lands and the oil productions in Mexico have lately been discussed so much through the press of the United States and in Mexico as well that I shall not go further into this matter which is to be submitted at this time, as a proof of good faith to Congress for ample final consideration, except to present a few facts which will speak for themselves.

"The value of oil exported during the year 1918 by all of the oil companies operating in Mexico was 150,000,000 pesos, equivalent to \$75,000,000 gold. The taxes paid by these companies amounted to 11,120,397.²⁷ pesos, or a little less than 8 per cent.

"The Government in 1917 collected taxes amounting to 6,854,537.42 pesos, equivalent to 12.8 per cent. We must take into consideration the fact that the exportation of oil in 1918 was only 1,251,242.317 tons more than in 1917, notwithstanding the fact that, due to the high price of oil, the companies received three times as much as the amount of money collected for oil in 1917.

"During the period of 1917 to 1918 the Government of Mexico reduced the taxes from 12.8 per cent. to 7.9 per cent., one-third less, in spite of the fact that the earnings of the companies increased considerably.

"Official records show that the oil companies of Mexico have been steadily and continuously increasing the production of oil, the profits received and the dividends paid being sometimes as high as 25 per cent. to their stockholders.

"Taxes on the oil lands and on oil production in the United States are generally much higher than in Mexico. In the State of Oklahoma the Government of the United States has granted lots of 170 acres to the public. The price paid for the right to exploit the subsoil of one lot from 1918 to 1931 was \$227,000; besides, the grantee is obligated to pay a certain percentage to the Indian tribe amounting to from 5 per cent. to 6 per cent. of the oil production, besides a minimum of 3 per cent. of said oil production to the State of Oklahoma. The total percentages on producing properties is ordinarily between 16 and 23 per cent., as the taxes increase with the production on a sliding scale. Consequently, the oil producer in Oklahoma pays at least 4 per cent. more than the oil producer in Mexico, but in a majority of cases he really pays 8 per cent. more, because the average daily production of the oil wells in Mexico is more than 100 barrels per day, and in Mexico the taxes do not increase in proportion to production.

"Now, in regard to rent, an oil lot of 170 acres (74 hectares) will cost in Mexico \$320 per year, or \$4160 in a period of 13 years from 1918 to 1931; adding to that sum \$192, which is the title tax, the total rent of such lot in Mexico would be \$4352 for even the largest producing lot, as against \$227,000 to be paid in Oklahoma on the example cited.

"In the State of Texas those who obtain oil lands have to pay \$2 per acre a year, one-eighth of the value of the oil produced and one-tenth of the gas conserved, which is obviously greatly in excess of taxes which obtain in Mexico."

Increasing Output of Mexican Iron and Steel.

Monterey, Mexico, May 2—[Special.]—The iron and steel plant of the Monterey Iron & Steel Co. will be running full blast in all of its departments within a few weeks, it is announced. It is now giving employment to about 1200 men, and the number will be increased to about 2500 when full operation is resumed. The orders for steel rails are not confined to the National Railways of Mexico, but embrace a number from mining companies

and private industrial interests, it is stated. The demand for structural steel is constantly increasing. This comes from the larger cities of the country. The company is now obtaining its iron-ore supply from its own orebeds situated only about 60 miles from Monterey. Formerly its ore supply came chiefly from Iron Mountain, situated at Durango. The Monterey Iron & Steel Co. is composed of Italians and the plant represents an initial investment of \$10,000,000 gold.

Valuation of Mexican Oil Properties Completed.

Monterey, Mexico, May 3—[Special.]—Valuation of the oil properties and investments in the petroleum industry in the Tampico region was recently finished by the Mexican Government. The total figures are far below the estimates of value made by the operating companies of their respective buildings. The Government estimate, as given out by the Department of Industry and Commerce, follows:

Value of wells, \$100,000,000; 1000 kilometers of pipe lines, \$50,000,000; steel and cement storage tanks, \$20,000,000; refineries, \$50,000,000; lands, \$50,000,000; railway lines, buildings, furniture, machinery, etc., \$30,000,000; total, \$300,000,000.

That the Government estimate of the value of the oil lands is far too low is very apparent. As an evidence of this fact, one American company places a value of \$75,000,000 on its oil land holdings. This is the Mexican Petroleum Co.

The various companies operating in the Tampico petroleum region have been notified by the military authorities of that district that in consequence of the attacks that have been made by bandits upon small parties conveying payrolls into the interior, in future military escorts will be provided upon notification, but that if no such notification is given and the parties proceed without them, the Government will not be responsible for their protection.

Much attention has been attracted to the discovery of petroleum made some time ago in the vicinity of Mapimi, a well-known mining camp located in the northeastern portion of the State of Durango and not far from Gomez, Palacio and Torreon. Geologists who have examined the region give it as their opinion that extensive oil deposits exist there. A number of practical oil men from the United States have gone to that section with the view to undertaking the exploitation of the new fields. A company has been organized composed of Mexicans and Americans, and it is reported that \$2,000,000 will be devoted to the enterprise. The Secretary of Industry and Commerce has been asked for the necessary authority. Evidences of the existence of petroleum have been found at various times in the States of Chihuahua and Coahuila, but no systematic development has been undertaken. Drilling is now under way on the northern bank of the Rio Grande not far from El Paso, where there are said to be encouraging indications of the presence of petroleum. It is the opinion of many who are engaged in the business that oil deposits will be found to exist generally throughout Northern Mexico, just as they are being developed in various portions of Texas.

American Geologists Investigating New Sources of Mexican Oil.

Monterey, Mexico, May 1—[Special.]—Several American geologists and oil experts are now in Mexico making investigation of petroleum possibilities in various parts of the country outside of the Gulf coast region, where the gusher wells are situated. Geological formations that are pronounced favorable to the existence of oil have been located in the Conejos district of the State of Coahuila and in a number of localities of the State of Chihuahua, including Guzman, Santa Maria and Casas Grandes. The commission of Mexican geologists which was appointed several months ago by the Federal Government to make oil research in the Pacific coast region of the country is said to have found strong indications of oil in the States of Sinaloa and Sonora, as well as in the peninsula of Lower California, just above La Paz. In several ranch wells of that section oil was found at shallow depth.

It is still uncertain as to whether the Carranza Government will resume the policy of granting concessions to foreign interests for the development of the oil resources of the country. If this practice is followed, there promises to be a large amount of prospecting work done in localities that are far removed from the existing producing oil fields.

Will Increase Sisal Fiber Production.

Monterey, Mexico, May 3—[Special.]—It is planned by the Commission Reguladora de Henequen, which controls the marketing of practically all sisal fiber shipped from Yucatan, to greatly enlarge its operations during the present year. Besides widening the foreign markets for the fiber, it purposed to construct factories in Yucatan for converting the raw fiber into bagging and various other products.

Although sisal fiber is grown most extensively in Yucatan, the industry is becoming important in the more northern part of Mexico, particularly in the region around Victoria, State of Tamaulipas. While both the henequen and zapupe fiber plants are grown in the Victoria territory, it is found that the zapupe is better adapted to the climate there. The zapupe fiber is of about the same length and texture as the henequen fiber.

An official statement of the sisal fiber industry of Yucatan, which has just been issued from the City of Mexico, says:

"The total amount of henequen fiber exported from Yucatan during the year 1918 is estimated at 600,000 bales, of a value of 48,000,000 pesos, or \$24,000,000 in American gold. It is expected that the present year will see a considerably increased exportation, as new markets are being opened in various directions. The Argentine Republic offers a good market, since its immense grain crops require millions of sacks for transportation. An initial shipment of 50,000 bales of fiber was made recently at a good price. The Commission Reguladora de Henequen proposes to put one of the steamers in its control into the service between Yucatan and South America, transporting cargoes of fiber and bringing back cargoes of wheat, for which there is a ready market in this country. Sixty-three million five hundred thousand bales of fiber were sold recently to the Food Administration of the United States at 15 cents American gold per pound. In the month of February the total shipments of fiber were 44,305 bales. It is the intention of the Commission Reguladora de Henequen to establish factories in Yucatan for the manufacture of fabrics and various objects from the fiber. It is not generally known, but hats and caps, shoes and other articles of every-day use and of good quality are now being made from the henequen fiber. In this manner it is expected a large amount of the product will be utilized at home, and it will not be necessary to depend upon the export of the raw material in order to dispose of the entire output."

Mexican Mineral Production for 1918.

Monterey, Mexico, May 1—[Special.]—Interesting statistics in regard to the operation of mines in Mexico for the year 1918 are contained in a statement just issued by Leopoldo Lopez, chief of the Bureau of Mines of the Department of Industry and Commerce. The figures as to the mineral production cover only the first nine months of that year. They show a total of \$180,000,000, or at the rate of \$20,000,000 a month, for the first nine months.

The total number of mining concessions in each State, the additional number granted in 1918 and their area in hectares (2½ acres to the hectare) is as follows:

Aguascalientes, 2671 mines in existence, 11 mining concessions granted in 1918; Lower California, 827 mines, 28 mining concessions granted in 1918; Coahuila, 814 mines, 74 mining concessions granted in 1918; Chihuahua, 4858 mines, 250 concessions granted; Durango, 3835 mines, 220 concessions; Guanajuato, 1233 mines, 153 concessions; Guerrero, 1024 mines, 34 concessions; Hidalgo, 1300 mines, 180 concessions; Jalisco, 1802 mines, 80 concessions; Mexico, 833 mines, 4 concessions; Michoacan, 632 mines, 37 concessions; Nuevo Leon, 1092 mines, 131 concessions; Oaxaca, 1610 mines, 62 concessions; Puebla, 239 mines, 31 concessions; Queretaro, 165 mines, 34 concessions; San Luis Potosi, 707 mines, 79 concessions; Sinaloa, 1600 mines, 135 concessions; Sonora, 5000 mines, 480 concessions; Tamaulipas, 147 mines, 11 concessions; Nayarit, 453 mines, 18 concessions; Vera Cruz, 67 mines, 7 concessions; Zacatecas, 2146 mines, 219 concessions; total number of mines in existence, 33,186; total number of concessions granted in 1918, 2289.

The total number of hectares covered by mining claims prior to 1918 was 452,632, or 1,130,075 acres. Add the 21,343 hectares (53,357 acres) granted in 1918, and a grand total of 1,183,437 acres results.

To Increase Mexican Shoe Output.

Monterey, Mexico, May 1—[Special.]—It is planned by Carlos B. Zetina, owner of the Excelsior shoe manufacturing plant in the City of Mexico, to install additional machinery with the view to greatly increasing the output of shoes. This factory now has a weekly output of 8000 pairs of shoes. It gives employment to 1000 workmen. Besides maintaining a night school for its employees, it conducts a regular day school for the children of the little industrial community. A workman's fund is maintained by the company and the workmen to provide for support of the men during sickness or old age.

In connection with the shoe factory a large tannery, a paper mill and a box factory are maintained, everything needed to get the finished product ready for market being produced on the premises.

Steel Interests Confer With War Department.

Recent meetings held in Washington between representatives of the American Board of Scrap Iron Dealers and representatives of the Materials and Scrap Section, Office of the Director of Sales, have developed the fact that the entire quantity of material on hand for disposition is much smaller than had been anticipated.

It is planned to call such meetings frequently so that the Government may obtain the views of the leading representatives of the steel industry and formulate a policy for the sale of the Government surplus of iron and steel.

It was decided that all steel and scrap metal should be disposed of by means of sealed proposals, and under certain prescribed regulations.

Commendations, Kicks and Comments

Shall We Be Afraid to Express Honest Conviction?

ADAMS & BOYLE, Little Rock, Ark.—As one of your most loyal and appreciative subscribers we suggest that you discontinue your attacks on the "League of Nations" Treaty.

Speaks Out In Meeting.

JAMES S. DOWDELL, President Dowdell-Strickland Company, Real Estate, Loans, General Insurance.—Enclosed herewith I hand you my check for \$6.50 to pay one year's subscription to your magazine. I have been an occasional reader, but from now on desire to be classed as a "regular."

In my humble opinion you publish the *best magazine* sold on the market. Your editor does not fail to speak out in "meeting," and I admire a man who has the courage to speak out his convictions such as you possess.

Thinking Loud Enough to Be Heard.

ALEX. M. ROBINSON, Tanks, Pipe, Engines, Pumps, Georgetown, Ky. I want to subscribe for the MANUFACTURERS RECORD. Please begin with your next issue and send bill to cover one year's subscription, and I will remit.

I read your MANUFACTURERS RECORD back in the days of the war, and was very much impressed with all you said.

You said what you thought, and had a happy way of thinking, according to my way of thinking, and was not afraid to "think" loud enough for any and every body to hear you.

Would Not Be Without It.

JOHN R. JONES, Attorney, North Wilkesboro, N. C.—Herewith my check for \$6.50 for renewal subscription to the MANUFACTURERS RECORD.

On account of so many additional financial burdens I had almost decided not to renew my subscription to the MANUFACTURERS RECORD for 1919, but "the gospel which you are preaching" is too valuable for me to miss a single copy.

During the year 1918 I assisted in the organization of over 50 Red Cross auxiliaries in Wilkes county, and during this campaign I made perhaps a hundred speeches. On a great many occasions I read articles from the MANUFACTURERS RECORD, especially those articles which you devote to 100 per cent. Americanism.

I want to congratulate you upon the splendid work which you are doing. The MANUFACTURERS RECORD is not only valuable from the standpoint of information, but it is doing a great work in broadening and deepening the lives of the American people.

Testing of Materials Indicative of Good Roads Activity in Texas.

Austin, Tex., May 5—[Special.]—As a direct result of the unprecedented activity in constructing good roads in Texas, many deposits of road materials are being developed. The laboratory for testing road materials at the University of Texas tested during the period between January 1 and May 1 this year road materials from 29 counties. The number of tests from each county ranged from one to ten. A statement of the work of this roads testing laboratory follows:

"The impetus given to road building in Texas since the signing of the armistice in November is clearly shown by the increased number of tests since the first of the year. The University laboratory tests all the road materials for the State Highway Commission, and the number of tests made here can thus serve somewhat as an index to the interest in good roads.

"One hundred and ten tests have been made since January 1, consisting principally of sand and gravel for road building and concrete purposes, but among these tests are asphalts to be used on roads in Houston and McLennan counties, cements to be used on roads and in bridges, steel for use in reinforced concrete, and one series of tests on a building tile for the Star Clay Products Co. of San Antonio.

"The enthusiasm for good roads in Texas is State-wide, as shown by the following list of counties and the number of tests made from each county:

Bexar, 2; Brown, 4; Bastrop, 2; Caldwell, 1; Cameron, 5; Culberson, 3; Coryell, 1; DeWitt, 2; El Paso, 7; Fayette, 10; Gonzales, 5; Hill, 1; Houston, 3; Hunt, 1; Johnson, 1; Kleberg, 1; Leon, 2; Limestone, 2; Mason, 2; McLennan, 2; Montague, 2; Tarrant, 1; Travis, 7; Uvalde, 1; Van Zandt, 1; Ward, 16; Wilbarger, 3; Williamson, 1; Wood, 3.

"The final and conclusive test for a road material on a given road is the manner in which it stands under the traffic, but a good idea as to its probable worth can be obtained by laboratory methods, and where there are several available materials and a doubt as to which is the best, laboratory tests of the different materials may be of great value to a county in determining which of a number of available materials to use."

\$425,000 for Good Roads.

Kingsville, Tex., May 1—[Special.]—Three hundred and fifty thousand dollars of 5 per cent. good roads bonds, voted March 15 by Kleberg county, were sold today to the highest bidder, Mrs. H. M. King, through her son-in-law, Robert J. Kleberg, who bid par and accrued interest. Mrs. King is owner of the famous King Ranch, out of which Kleberg county was cut six years ago. Judge Ben F. Wilson and the county commissioners, who awarded the bonds, together with an advisory board of ten members, are considering plans, including the employment of an engineer, to construct a system of hard-surfaced roads for the county. Concrete, gravel with bituminous surface and other types of road will be considered before a decision is made. There is an abundance of soft rock in the center of the county which is being tested for road building. A trunk line highway is to be constructed through the county to connect the State roads system with the lower Rio Grande Valley. Brooks county, south of Kleberg county, is already at work on its section. The officers in charge of the Kleberg county plan are anxious to proceed carefully in order to obtain the most lasting road possible. The Kleberg County Commercial Club has been active in championing the good-roads movement.

In addition to the \$350,000 of bonds voted, the State of Texas has extended aid to the amount of \$50,000 for building the trunk line through this county and the Federal Government has granted \$25,000.

The Purposes of the Mississippi Welfare League.

JACK C. WILSON, Executive Secretary The Mississippi Welfare League, Jackson, Miss.

In your issue of April 24 there appeared an article under a Jackson, Miss., date which made reference to certain work of the Mississippi Welfare League, of which I am secretary. This article, while well meant, is misleading in some of its statements,

or, more correctly, it is so written as to be likely to lead to incorrect and possibly harmful inferences.

In so far as the quotation ascribed to me is concerned, I may say that my discussions with Northern editors, white or black, have been addressed solely to the purpose of answering the charges that the Southern white people were guilty of outrages against negroes, and that the South was not the best place for the negro to live. By simply presenting the truth of Southern conditions I have altered the views and modified the expressions of some of these men.

As to the purposes of the Welfare League, they are circumscribed by no such narrow limitations as your correspondent puts upon them. In so far as our activities embrace the negro, it is incidental to an object which is inclusive of all the people of the State. Our chief concern is with the white boys and girls and the white people of Mississippi. The secretary of the league is at present engaged in a State-wide campaign in the interest of education, and is everywhere meeting with the enthusiastic response of the white audiences whom he is addressing.

I wish also emphatically to disagree with the reference the article makes to what its author calls "the old Vardaman element." I wish to state most clearly and positively that the Mississippi Welfare League was organized and is conducted absolutely upon non-factional, non-partisan and non-political lines. Its membership embraces men of all factions, classes and interests in the life of the State. Its appeal is to the best instincts of all men and women, and no more unjust and hurtful charge could be made against its future usefulness than one which tended to array it either for or against the fortunes or personality of any man or set of men in the State's political life.

To Spin Combed Yarn.

Numbers 60 to 80 combed peeler cotton yarn will be manufactured by the Sadie Cotton Mills Co., Kings Mountain, N. C., recently mentioned as incorporated with \$150,000 capital. This corporation will build a 200x100 or a 220x100-foot brick building with cement floor costing \$25,000 and install mechanical equipment at a cost of \$125,000. The machinery will include 5440 spindles and an electric power equipment distributing from 250 to 300 horse-power. Officers have been elected as follows: L. A. Kiser, president; R. L. Mauney, vice-president; D. C. Mauney, secretary-treasurer. Prices are wanted on electric motors and hangers, tank and tower for fire protection, piping for sprinkler and heating system, and on mill lumber.

A \$180,000 Woolen Mill Addition.

Building and machinery contracts have been awarded for the Berkeley Woolen Co.'s proposed addition at Martinsburg, W. Va., the investment to be \$180,000. The building will be of standard brick mill construction, 100 feet long by 60 feet wide, costing \$120,000, P. O. Keilholtz of Baltimore being the engineer and architect. The machinery (costing \$60,000) will include 7240 spindles and 54 looms, with 250-kilowatt electric drive and belt transmission.

For a 15,000-Spindle Mill.

From 12,000 to 15,000 spindles will be the equipment of a combed yarn mill which the Victory Yarn Mills Co., Gastonia, N. C., will build. This company has been chartered with \$500,000 capital by C. B. Armstrong and associates, recently mentioned as to build a mill. It has purchased a 65-acre site on the Caroline & Northwestern Railway.

Textile Notes.

F. P. Blair and associates have incorporated the Athletic Underwear Co., North Wilkesboro, N. C., with \$50,000 capital.

An additional weave shed will be built by the Brookford (N. C.) Mills Co. and equipped with looms for weaving convertible cotton cloth.

Lockwood, Greene & Co., Boston and Atlanta, will prepare plans and specifications for a three-story reinforced concrete cotton mill building to be erected by the Indianhead Mills of Cor- dova, Ala.

RAILROADS

Railroad Revenues Approaching \$5,000,000,000.

Statistics compiled by the Bureau of Railway Economics, Washington, D. C., and covering lines having annual operating revenues of more than \$1,000,000 during 1918, show that the aggregate of operating revenues of such roads in the United States last year was approximately \$4,913,000,000, an increase of almost 45 per cent. as compared with the annual average of the test period 1915-1917, inclusive, on which the Railroad Administration's relations with the roads are based. Operating expenses reached an aggregate of \$4,007,000,000, increase 74.7 per cent.; net operating revenue \$906,000,000, decrease 17.4 per cent.; taxes \$187,000,000, increase 22.6 per cent.; net operating income \$630,000,000, decrease 23.7 per cent. Operating ratio during 1918 was 81.6 per cent. of operating revenues, as compared with 67.6 per cent. annual average during the test period.

As compared with 1917, the operating revenues in 1918 increased 21.1 per cent., operating expenses increased 40.2 per cent., and net operating revenue decreased 24 per cent. Operating ratio was exactly 81.55 per cent. as compared with 70.57 per cent. for 1917.

This data is based on the railroads' reports made to the Interstate Commerce Commission.

Southern Railway Improvements at Sheffield, Ala.

Extensive improvements were recently completed by the Southern Railway at Sheffield, Ala., according to the previously announced plans providing enlarged facilities for freight and passenger business both of which have greatly increased because of the Government water-power development at Muscle Shoals, on the Tennessee River, and the construction of the nitrate plants near there. The improvements include a new yard of 680 cars capacity immediately east of the Sheffield Station, addition to Loyall yard just west of the station, enlargements to the passenger station, addition to the shops, ten radial tracks, construction of a new freight station and office. A bridge over the river is also being improved. Furthermore, the railroad is building for account of the Government about 50 miles of tracks for the use of the two nitrate plants and to provide connections with the dams at Muscle Shoals.

A Mexican Railroad to the Pacific.

Monterey, Mexico, April 30—[Special.]—During the recent visit of President Venustiano Carranza to Guadalajara, the beginning of construction on a railroad between that city and the Pacific port of Chamela, 150 miles, was celebrated. The company was organized at Guadalajara and is said to be amply financed. Serious engineering and construction difficulties will be encountered along the mountainous route, but the region to be traversed is rich in precious minerals, while the coastal country adjacent to Chamela is well adapted for agriculture. Chamela has a fine natural harbor, and the Mexican Government will construct port facilities, including wharves, loading equipment, etc., President Carranza announced.

A Short Line to Be Sold.

M. H. Willis, special commissioner, will, in accord with a Federal Court order, offer for sale at auction all of the property and franchises of the Parkersburg & Ohio Valley Electric Railway Co. on May 24 at Parkersburg, W. Va., the terms being cash. The line is about five miles long from Sistersville to Friendly, W. Va. Particulars will be found in the advertising columns.

Lower Import Rates from Pacific Coast.

Washington, May 7—[Special.]—The Railroad Administration has announced reductions on import rates from Pacific coast ports to all Eastern territory on a great variety of products from the Orient, date of effect to be announced later.

Two Contracts Completed, Now Have Another.

J. N. Gillis & Son, railroad contractors of Brewton, Ala., who have just completed contracts at Pensacola, Fla., for the extension of the Gulf, Florida & Alabama Railroad to the Navy-yard, and for revision of the Bay Shore line of the Pensacola Electric Co., have been awarded a contract to extend the logging railroad of the Vredenburgh Sawmill Co. from Vredenburgh toward Camden, Ala., through a large tract of virgin pine timber. The work is heavy, and several months will be required to complete the grading.

Central of Georgia Improvements Planned.

A special meeting of the stockholders of the Central of Georgia Railroad is to be held May 28 to vote on a proposed issue of refunding bonds amounting to from \$50,000,000 to \$75,000,000. The proceeds of bonds issued under this new mortgage are to be employed for retiring existing bonds when they mature and for improvements. It is stated that considerable improvement work remains to be done, much that was needed having been deferred because of the war.

Dam and Pumping Station.

A contract has been awarded by the Illinois Central Railroad to the Railway Water and Coal Handling Co. of Chicago to build a concrete dam across the Tradewater River at Dawson Springs, Ky., to furnish water for a pumping station. It will be 125 feet long, 14 feet high and 10 feet thick, and will cost about \$6000. The pumping station contract is let to the same concern. This building, with equipment, will cost about \$35,000.

Railroad Notes.

Company forces are building for the Southern Railway in the Atlanta transfer yard two one-story transfer sheds, each 760 feet long. One is 30 feet wide, the other 16 feet.

J. J. McEwen has been appointed Federal auditor of the Gulf, Mobile & Northern Railroad and the Meridian & Memphis Railroad, with headquarters at Mobile, Ala., succeeding H. M. Hood, who has gone with the Railroad Administration at Washington.

M. M. Elkan of Macon, Ga., has been awarded a contract by the Southern Railway to build a bridge costing about \$30,000 at Gaffney, S. C. It will be of reinforced concrete and will have three spans, one of 35 feet and two of 26 feet each. There will also be a retaining wall approach.

The proposed sale of the Georgia Coast and Piedmont Railroad at Brunswick, Ga., did not take place May 3, according to a report from Savannah. Continuance was granted, it is stated, because of the illness of Henry L. Cohen of New York, chairman of the bondholders' committee.

The Branchville & Bowman Railroad, a narrow-gauge line 12 miles long from Branchville, S. C., on the Southern Railway, to Bowman, S. C., has been acquired by Earle and Willis Dukes of Branchville, according to a report, and improvements have been started to put the line in good operating condition.

The Interstate Public Service Co., which has just announced plans to build an interurban railway freight station at Louisville, Ky., also promises to establish about August 1, when the station is expected to be finished, extended freight shipping facilities via electric railways to all traction stations in Indiana and to some in the western part of Ohio.

R. W. Spofford has been appointed local general manager of the Manila Electric Railroad & Light Co., Manila, Philippine Islands, by the J. G. White Management Corporation, New York, N. Y., the operating managers of that company. He is a graduate of the United States Naval Academy, and after several years' service in the navy went with the Augusta-Aiken Railway and Electric Corporation, Augusta, Ga., in 1911, and later was its general manager. When the United States entered the world war he was called for service in the navy, but is now retired with the grade of lieutenant-commander.

MECHANICAL

Plate Castors Used in Steel Plants.

An interesting, important and economical labor-saving device is the application of roller-bearing plate castors in steel mills as displayed in the accompanying picture, so that one workman can handle large plates to and from punching, shearing and other plate-working machines, while formerly it required the united energy of several men to move them about. Besides, it is observed that one man operating plates over a plate castor bed will handle more plates in a day than were formerly handled by four men. The castors here shown are equipped with Hyatt roller bearings, ball thrust bearings of large size being used to reduce friction as well as to take care of reasonable shocks. The manufacturer has given special care to the design of the bearings and their application to this particular kind of work. The wheels are of cast iron, six inches in diameter, with heavy flanges and crowned faces. They are also provided with roller bearings of liberal size of the same make, with arrangement for grease lubrication. The castors have set screws, so that when plates are to be moved in only one direction they may be prevented from revolving.

The standard arrangement of a plate castor bed consists of cast-iron floor plates five feet square, with heavy posts of cold-rolled steel 20 inches apart in both directions. The height of the posts is made to suit conditions in any particular plant, but ordinarily the tops of the wheels will be from $2\frac{1}{2}$ to $3\frac{1}{2}$ feet above the floor. The bearings for both wheels and castors are made heavy to stand the handling of heavy plates and yet reduce friction to the minimum. The floor plates have their surfaces checkered, so that workmen have a good foothold. The posts on which the castors are mounted may be removed easily from their sockets so as to afford a clear floor whenever that may be desired. Instead of using cast-iron floor plates, a concrete floor can be laid with sockets therein for the posts. Still another and less expensive method of installing a plate castor bed temporarily is to set 8x8-inch timbers 20 inches apart, with their upper sides flush with the ground. Holes are bored in the timbers at the necessary intervals and wrought-iron pipe sockets driven tightly into the holes

for the castor posts to set in. Cast-iron plugs should be provided to close the sockets when the posts are removed. When cast-iron floor plates are used, it is recommended that they be laid on concrete and grouted in position.

The plate castor bed is used not only for handling plates to and from plate-working machines, but for handling them from one location to another, or between two machines, or for storage of plates alongside of a machine as plates are finished.

The castors shown in the illustration are made by the Edward F. Terry Manufacturing Co., Grand Central Terminal, New York city, and they are in successful use at many of the large steel plants.

Boiler Girth Seam Protector.

A device for prevention of failure of seams in steam boilers when it is necessary for a seam to be placed directly over the fire is to be found in the boiler girth seam protector, which is made of high-grade fire tile, and is constructed and applied as shown in the illustrations herewith.

Concerning this invention the manufacturers remark that "the practice for the construction of horizontal steam boilers longer than 10 feet is two or more rings; this naturally compels the builder to put one of the girth seams directly over the fire, or near the bridge wall, where the heat is concentrated, thereby fire-cracking the plate." It is further stated that any fireman or hand man can easily attach the protector to a boiler successfully in 20 minutes or half an hour, everything complete for making the attachment being provided with the device itself. If a boiler is already giving trouble at such a girth seam, the seam should be caulked and the leakage stopped. Then one of the pro-



THE BOILER GIRTH SEAM PROTECTOR.

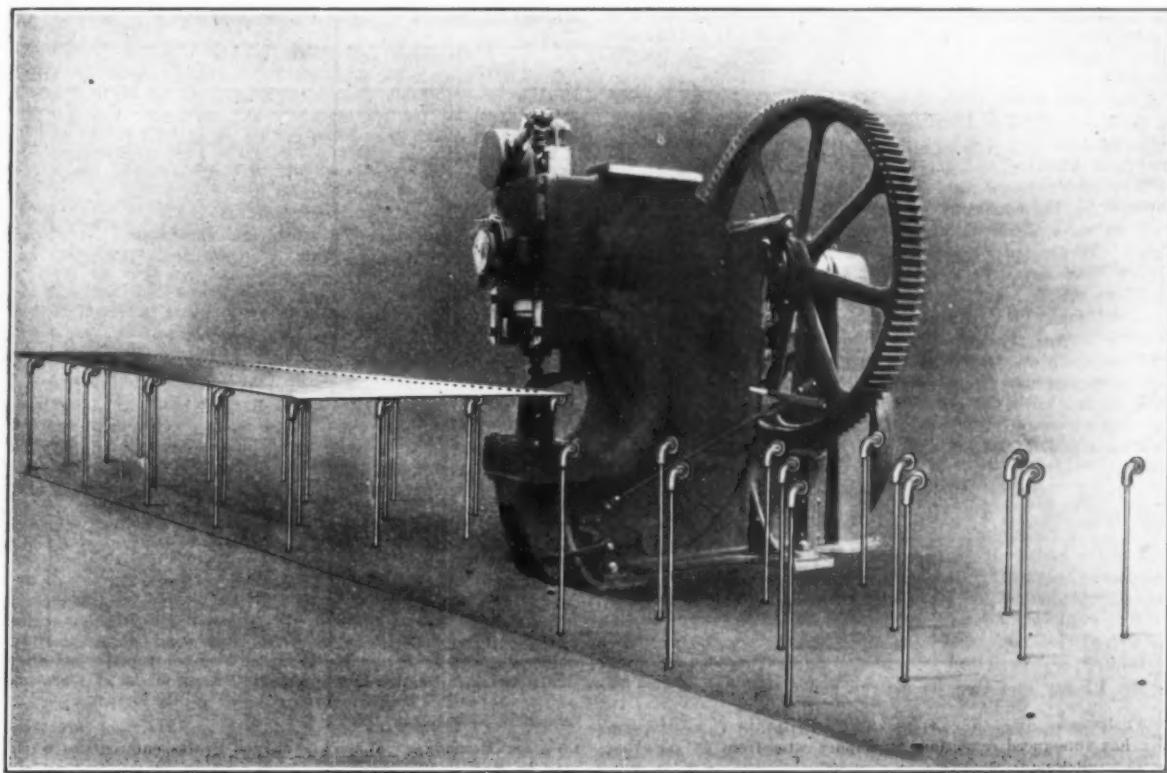
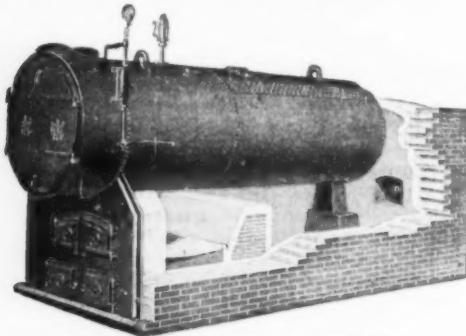


PLATE CASTORS IN USE.

tectors should be attached, after which, it is asserted, "the seam will remain absolutely dry thereafter."

When one of the protectors is to be ordered it is necessary to state the diameter of the boiler to which it is to be applied and whether the seam is made with either flat or steeple head rivets. If the boiler has been used and be so badly cracked that it is necessary to put on a new fire sheet, there is a protector attaching lug which can be riveted into the proper place when such repairs are being made. Then all that is necessary is to attach the protector. Directions showing how to proceed in applying the protector are given in a circular.



HORIZONTAL BOILER AS DESCRIBED.

This boiler girth seam protector is known by the name of "National," being made by the National Boiler Protector Co. of Dayton, O. It consists of five 10-inch sections (each section consisting of a wedge nut, one cap screw, a metal lug and a refractory covering) to cover about 50 per cent. of the lower part of the boiler, or, in other words, the circle seam. These sections are attached to the boiler independent of each other, but with close-fitting joints, which, it is stated, "makes it impossible for the protector to be affected in any way from expansion or contraction."

New Seed Oil from Cockle Burr.

Raleigh, N. C., May 5—[Special].—Out of the cockle burr which sticks to the clothes of the passerby, and which has generally been considered a pest, is now being made a new and valuable oil available for use in paints and varnishes and adapted for food.

The details were explained by Mr. L. B. Rhodes, oil chemist of the North Carolina Department of Agriculture, in an address delivered here May 3 before the North Carolina Section of the American Chemical Society.

"The cockle burr," said Mr. Rhodes, "is widely distributed through the United States, so that it is more or less of a nuisance in most localities, and is very abundant throughout the South. If the burrs could be obtained systematically in sufficiently large quantities, they could be easily milled."

"Those which I have gathered were either dry or in a half-dry condition. They were first cut in half by a trimming board and the kernels mashed. They were then placed in a box and vigorously shaken. The hulls were taken out, leaving the kernels at the bottom. These kernels were then pounded and rubbed in a mortar until the black shucks were removed, after which the husks were forced out by blowing. The ground kernels were then wrapped in cheesecloth and pressed between cold steel plates.

"The oil thus obtained was allowed to settle for three or four days and then filtered. It is of a light yellow shade; has a clear, sparkling appearance and a pleasant odor and an agreeable nutty taste. It keeps well without becoming rancid. On account of this quality it should eventually be used as a substitute in the dietary for other vegetable oils."

"The press cake left after expressing the oil should be of value as a food for cattle, and certainly it can be readily used as a fertilizer."

Mr. Rhodes said that he had no doubt that before long the cockle burr oil would have a place in commerce because of the richness of the kernel and the ease with which the oil can be extracted. The yield from the kernel is about 30 per cent., and the kernels constitute about the same proportion of the bulk of the crude burrs. The press cake contains 40.34 per cent. of protein.

FOREIGN NEEDS

[The MANUFACTURERS RECORD receives many letters from abroad asking for information about American goods, and others from men who wish to represent American houses. Without assuming any responsibility for these concerns, we publish a summary of the foreign letters of inquiry from week to week.]

Agent and Exporter.

JULES KEMPF, 62 Rue d'Hauteville, Paris, France.—Ready to represent American houses throughout France and her colonies. Also anxious to send all French products to any American importers. Have large facilities and clientele, also special overseas-shipping service and means of correspondence in any language useful to patrons.

Gentlemen's Furnishings.

O. MORE, Reconquista 835, Buenos Aires, Argentina.—I would like the names of exporters dealing in my line, namely: Collar buttons, studs, suspenders, garters, etc.; also stockings. I would very much like to represent any manufacturing house dealing in these articles, and am sure results would be big. (Correspondence in Spanish suggested.)

Machinery Wanted.

SOCIEDAD MINEIRA SE RA DA ESTRELLA, Rua Da Padaria, 48, 1, Lisbon, Portugal.—The products in which we are interested are the following: General machinery, both steam and water-power; electric machinery in all its applications—transformers, alternators, motors (both professional and amateur) and machinery for chemical products. Would appreciate information pertaining to these articles.

Hardware and Paints.

A. K. ADITYA, Engineers, Contractors, Merchants and Agents, 8/2 Hastings Street, Calcutta, India.—It is desirable that some manufacturers in your land should come forward to create a fair market before the Indian public. Shall be much obliged to know of any firm who can ship hardware and paints. Shall be glad to be their chief agent in Calcutta. Banking references given.

House Furnishing Goods—Steam Fitters' Supplies.

R. BAILLY, 6 Rue Mathurin, Paris, France.—Will sell American articles in French markets on condition that they are of best quality and from first-class houses. General articles for household use, or steamfitters' supply trade are familiar and should prefer to deal in these lines. Would like addresses of American manufacturers of machines to make cushions of silk, mountain flax, cork, etc.; also catalogs.

Cameras and Photographic Supplies.

HUGO SVENSSON & CO., Storgatan 13, Göteborg, Sweden, are manufacturers and wholesale dealers in cameras and all kinds of photographic supplies for photographers and amateurs; therefore are interested in American cameras, dry plates, gaslight papers of high class for studio work, roll film, film packs, photographic chemicals, darkroom utensils, etc., and would like to come in connection with good American export firms in these lines.

East India Exporters and Importers.

DINANATH DATTA & CO., Tala, Calcutta, India.—Exporters and importers; willing to do American business. Ship all sorts of Indian produce, oils, drugs, seeds, foodstuffs, Indian works of art, etc. As to imports, take manufacturers' direct representation or sole agency only. Have been established as export and import merchants for the last 10 years. Town office is 11 Old Court House Lane, Calcutta.

General Agency Established.

HENRI TURAB & CO., Camp Cesar Ramleh, Alexandria, Egypt.—Our new style and address are as follows: General Import & Export Agency, P. O. Box 183, Alexandria, Egypt. Will conduct business as indicated by the change of name. The new arrangement gives greater extent to transactions. Mr. Turab left Alexandria for the Near East to appoint representatives there. The new name is registered.

Machinery, Tools, Metals, Motors.

F. CHASSAING, 55 Rue de Soissons, Bordeaux, France.—Would like to represent American houses. Is 37 years of age and has had many years traveling experience. Has thorough knowledge of the market, especially in the southwest of France. Handles machines, tools, metals in bullion and sheets, steel, iron, stocks of tools, mill equipment, marine and industrial motors. Was in the motor convoy, which was demobilized March 1.

Shoe Leather, Findings, Etc.

PEDRO COMELLA, CIUDADELA, Minorca, Spain.—I trust that I may be able to represent some of the manufacturers advertising in your journal. The articles that would find a ready market in this section

are leather for making shoes, also all findings; celluloid eyelets and hooks. These are the articles I would prefer to handle at present. I would like to get into communication with concerns which manufacture these things. (Correspondence in Spanish suggested).

Hats, Textiles, Chemicals.

LEON SELIEDLowski, Campo Marte 89, Santiago de Chile, Chile.—The articles that interest us at present are straw and felt hats for men and boys. I would also like to hear from manufacturers of textiles, woolen goods, etc.; chemical and pharmaceutical products. Would like to have addresses of houses dealing in these products. I will give personal references. I have been traveling in this country for the past 12 years. (Correspondence suggested in either Spanish, Italian or French).

Agents, Exporting and Importing.

THE CITY PAPER MART, Tuticorin, India.—Represents merchants and manufacturers. Imports metals, hardware, sundries, piece goods and all manufactured goods. Exports senna leaves and pods, Palmyra fiber and other raw products of the southern part of India. Has own offices at Madras, Madura and Trivandrum, and will open one at Cochin, an important business center in the Malabar Coast district. Would like to get in touch with good firms interested in both exports and imports.

Agents and Merchants.

MULDERS & CO., 25 Rue Grande Ourse, Antwerp, Belgium.—Who are soliciting agencies, say: "Our offices will be installed at Brussels and Antwerp. Our traveling men will visit the wholesale and retail houses in Belgium and Holland. We can give all references and guarantees in banks. We can accept merchandise on trust and deposit countervalue in bank. We buy on personal account and request offers with premiums and samples from firms who do not wish to be represented in Belgium."

Foreign Agencies for General Goods.

ATLAS TRADING CO., 150 Nassau Street, New York.—We are looking for machinery for extracting oil from coconut, and machines for stretching the fibre and making brushes. We are willing to represent manufacturers interested in placing articles of this kind in foreign markets. We are also interested in representing manufacturers of steel, iron and tin plates; machinery, tools, agricultural implements, chemicals, pharmaceutical products, household articles, novelties, canned goods, cotton piece goods, etc. We are establishing agencies in all foreign countries.

Porcelain Flowers and Kindred Goods.

RODOLFO HUBER, Havana, Cuba.—I am open for samples of porcelain flowers and metal foliage; also need rubber tubes for foliage, both green and white, Nos. 0, 1, 2, 3 and 4, to cover the wire on the leaves. I also need dies for the manufacture of leaves with corresponding apparatus to stamp them, this to be for some sort of native power. I would also like to receive catalogs of machinery for printing gilt letters, such as that made by R. Hoe & Co., New York, type No. 3421 Washington Press, with prices and discount for export. I desire to obtain exclusive agencies for such goods in Cuba. (Correspondence in Spanish suggested.)

Machinery of Various Kinds and Installation.

N. G. CAMILOS & CO., 5 Rue Santarose, Athens, Greece.—Have been for years concerned in selling of machines and making mechanical installations. Would like to hear from reliable manufacturers of heavy-oil motors, thin-gasoline or gas motors, steam machines, water turbines, all kinds of pumps, electrical machines, electric apparatus and accessories, automobiles, refrigerating machines, agricultural machinery, wood-working machinery, elevators, hot-air and central-heating apparatus, besides other kinds of machinery. Catalogs and price f. o. b. New York desired. Would like, if convenient, to represent manufacturers who have no representation in Greece.

American Goods Wanted in Australia.

A. W. STITT, 382 George St., Sydney, Australia.—We are representing a number of American manufacturers for sales in Australia and New Zealand and would be keenly interested in getting in touch with others manufacturing hardware, iron and steel products, paper, rosin, galvanized fencing wire, chemicals, black and galvanized steel hoop, optical goods, leather cloth, forks, hoes, shovels, conduits, etc. We represent on a commission basis only and wish to be in touch with manufacturers direct so as to be quoted lowest bed rock prices. * * * It is going to take a little time for matters to settle down, but Australia has a wonderful buying capacity and there is no question regarding this country's future. * * * The country has been prosperous and would be more so had not the diversion of shipping to troops and supplies prevented this country from shipping her enormous accumulation of wheat and products. At the present time there are approximately 4½ million tons of wheat of best quality

awaiting shipment. * * * There was a decided antipathy to anything American until your country entered the war, but now we would say that Australian merchants and people generally like American goods and the American method of doing business and will continue to trade so long as manufacturers supply good quality at reasonable prices.

General Machinery, Belting, Etc.

INDIAN COMMERCE & INDUSTRIES CO., K. Surya Narayan Row, Madras, India, solicit sole selling agencies for industrial and agricultural machinery, including oil and steam engines, drilling machines, lathes, press equipment, pumps, cotton machinery, crude-oil engine tractor, bullock and engine-power ploughs, flour mills, sugar machinery, asbestos packings and joints, lubricating oils, aluminum sheets and circles, iron and other metals, belting leather, cotton and hair, hardware sundries, etc., which constitute the company's chief lines. American goods are popular with the people of this country; American rice hullers and other machinery have given the best results. The people are very anxious to take to industries. Company says it represents some of the best European manufacturers.

Movable Heating Stoves, Locks, etc.

A. HERAUD, Albi, France.—I should like to find a reliable house manufacturing movable heating stoves for apartments, for all systems. If I represented such an article for an important firm I am convinced that I should sell a large quantity of them all through France. Stoves of cast iron, or cast iron and sheet iron, with adjustable flame, with oil, or else wood fuel, would be very easy to place. It is indispensable that catalogs and prices should be printed in French; goods are much more readily sold when this condition is observed. I would like to have the addresses of such manufacturers, and also of a good manufacturer of locks, of all kinds, and window fastenings. They could also be readily sold. I will return from my military service soon to Marseilles and begin business immediately.

Steel Plates and Machines for Japan.

W. C. KINSELLA, 1104 Union Avenue, Kansas City, Mo., reports request for quotations for export shipment c. i. f. Japanese ports, or free alongside of ship at Seattle, for Lloyd's steel plates 5x20 feet, 100 long tons each of 5/16, 7/16, 1/2, 5/8 and 3/4-inch thickness, respectively, all for April delivery, making a total of 500 tons; also for machinery for iron-working shop, the latter including punching and shearing machine, punching machine, counter-sinking machine, edge planer, with motor; horizontal punching and beam-bending machine, angle cutter and motor, plate-scraping machine, with motor; plate-straightening machine and motor, plate-bending roller, with motor; hydraulic plate and section joggling machine, with manhole punch; hydraulic plate-flanging machine, hydraulic frame squeezer.

Desire to Represent American Machinery Manufacturers.

F. C. CORNET, Box 162, Johnstown, Pa.—American manufacturers of mining and quarrying machinery and supplies, as well as dealers in mill equipment, who are looking for an opportunity to put their wares before the Belgian industrial world, are invited to get in touch with Messrs. Gustave and Charles Watteyne, Avenue de la Couronne, Brussels, Belgium. These two young men, just returned home after 4½ years spent in fighting Germany, have immediately resumed the business they dropped in August, 1914. In the past they are said to have been very successful as representatives of continental firms, their special field being the coal-mining and steel industries, as well as all manufacture where machine tools are used and oils, ropes, etc., are consumed. Their relations and business connections are such that they are in a favorable position to present reliable American products, and they will be glad to answer all queries sent them.

Minerals and Metals.

L. D. TRIOULEYRE, 8 Rue Deves, Neuilly S. Seine, France.—Received the MANUFACTURERS RECORD and "noticed with what energy you defended American interests against German treacheries and procedures. I wish that among industrial men, many might be animated by sentiments as resolute as yours." Thinks Americans should employ the French language in conducting business correspondence to France; indisposition to do this permitted the Germans to invade French markets long before their armies invaded the country. Has handled a great deal of foreign business for organizations for which he was engineer, especially minerals and metals, lead, zinc, iron, manganese; all kinds of combustibles, mining materials and others for mills, transportation, etc. Is mining engineer by profession. Has been charged by the Committee of Engineers and by industrial groups to find practical means to develop international trade. Desires to establish relations with houses which want to find an opening in France for their products. The Chambre Syndicale des Ingénieurs (committee on engineers), 206 Boulevard Pereire, Paris, France, desires to quickly establish relations with the committee on engineering and syndicate of engineers of the United States.

Construction Department

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$30.00 per year.

Airplane Plants, Stations, Etc.

N. C., Asheville.—Airplanes.—Asheville Aerial Corp., capital \$3000, incptd. by Henry Westall and others.

Bridges, Culverts, Viaducts.

Ala., Montgomery.—Montgomery County Board of Revenue asks bids until June 9 to construct reinforced concrete bridge over Catoma Creek, on Norman Bridge Road; 1288 ft. long, 18-ft. roadway; W. S. Keller, State Highway Engr. Lately noted. (See Machinery Wanted—Bridge Construction.)

Ark., Marked Tree.—Ozark Trail Road Improvement Dist., Poinsett County, W. H. Dilatash, Secy., asks bids until May 27 to construct following bridges: Four 50-ft. steel-plate girder spans, width 18 ft., with alternate bids on steel truss spans of same length and width; two 50-ft. steel truss spans, width 16 ft., 400-ft. concrete viaduct, width 18 ft., 112-ft. "I" beam spans, width 16 ft.; 95 cu. yds. reinforced concrete culverts; Morgan Engineering Co., Engrs., Memphis, Tenn. (See Machinery Wanted—Bridge Construction.)

Ga., Cochran.—Bleckley County Commsrs. ask bids until May 24 to construct 3 reinforced concrete bridges; bridge No. 1 consists of 12 30-ft. arches, 435 cu. yds. Class A concrete, 235 cu. yds. Class B concrete, and 59,000 lbs. reinforcing steel; bridge No. 2, 26 ft. long, reinforced concrete deck and 2 abutments; bridge No. 3, 22 ft. long, reinforced concrete deck with 2 abutments; Garrett & Slack, Project Engrs., Bell Bldg., Montgomery, Ala.

Mo., Neosho.—Newton County Court let contract to Joplin Concrete & Steel Construction Co., Joplin, Mo., at \$14,600 to construct concrete bridge across Shoal Creek at Granby.

N. C., Southport.—State Highway Coms., Lieut. Frank Page, Chrmn., Raleigh, is considering construction of causeway from ferry on Brunswick County side of Cape Fear River to cost \$150,000, including bridge over Brunswick River.

S. C., Gaffney.—Southern Railway let contract M. M. Elkins, Macon, Ga., to construct bridge with retaining wall approach; reinforced concrete: 3 spans; one 35 ft. long and two 26 ft. long. (Lately noted.)

Tenn., Clarksville.—Montgomery County voted \$500,000 bonds to construct bridge across Cumberland River, 7 mi. from Clarksville. Address County Commsr. (Lately noted to vote.)

Tenn., Knoxville.—Louisville & Nashville R. R., W. H. Courtenay, Ch. Engr., Louisville, Ky., will construct steel bridge across Tennessee River; cost \$200,000.

Tex., Bridgeport.—Bricks.—Harry Hardy will organize company to establish brick, electric-light and ice plant.

Tex., Clarendon.—Donley County Commsrs.

ordered vote on tax to construct bridges and roads.

W. Va., St. Albans.—Kanawha and Lincoln counties will construct one 200-ft. and one 80-ft. span, steel masonry bridge; also ½ mi. road; cost \$8000; open bids June 4; F. G. Burnett, Engr., Charleston, W. Va. (See Machinery Wanted—Bridge Construction.)

Canning and Packing Plants.

Fla., Lakeland.—Collins Canning Co. increased capital from \$50,000 to \$100,000.

Miss., Biloxi.—Desporte Brothers (Theo. J. and Ernest Jr.) will erect 110x40-ft. shrimp and oyster cannery; install machinery.

N. C., West End.—Pinehurst Peach Co., capital \$50,000, incptd. by M. C. McDonald, H. L. Hutt of West End, and others.

Va., Smithfield.—W. H. Sykes plans cannery for potatoes and tomatoes. (See Machinery Wanted—Canning Equipment.)

Clayworking Plants.

Ala., Attalla—Bricks.—H. M. Johnson, Gadsden, Ala. (lately noted to establish plant) will install stiff mud brick outfit with 25 to 40 H. P. electric motor power; daily capacity 20,000 bricks. (See Machinery Wanted—Motor; Shafting, Belting, etc.)

Ga., Augusta—Bricks.—Independent Brick Co., capital \$25,000, incptd.; erect plant; daily capacity 500,000 bricks.

Miss., Charleston.—Charleston Brick & Tile Co., capital \$10,000, incptd.

N. C., Carthage—Bricks.—Kivett Brick Co., capital \$25,000, incptd. by W. G. Jennings, M. G. Dallymple and others.

N. C., Cerro Gordo—Bricks.—Cerro Gordo Brick Co., capital \$10,000, incptd. by R. B. Stephens and others.

Coal Mines and Coke Ovens.

Ala., Dora.—Mary Lee Coal Co. organized; J. Johnson, Pres.; develop 160 acres; daily output 200 tons. (Lately noted incptd.; capital \$15,000.)

Ky., Ashland.—Green Rock Coal Co. increased capital from \$25,000 to \$50,000.

Ky., Henderson.—L. P. Kleiderer, 4th St., Louisville, Ky., acquired coal mine; construct coal shaft 7x14 ft. in the clear and tipple to cover 4 tracts; install equipment. (See Machinery Wanted—Shaft (Coal) and Tipple.)

Ky., Morton's Gap.—Flat Creek Coal Co., capital \$30,000, incptd. by Percy C. Henry, Jr. and others.

Tenn., Chattanooga.—Suck Creek Coal Co., capital \$350,000, organized; G. F. Mehan, Prest.; Z. C. Patten, V.-P.; C. L. Hall, Gen. Mgr.; develop 25,000 acres; acquired mines of Montake Coal Co.

Tenn., Jackson.—Beare Ice & Coal Co., capital \$200,000, incptd. by Robert L. Beare, J. A. Williamson, W. H. Briggs and others.

Tenn., Memphis.—Turner & Turner Coke & Fuel Co., capital \$50,000, incptd. by L. E. Turner, G. S. Turner and others.

Tenn., Memphis.—Memphis Coal Co. increased capital from \$60,000 to \$100,000.

Tenn., Memphis.—Memphis Coal Co. increased capital from \$60,000 to \$100,000.

W. Va., Buckannon.—West Virginia & Pennsylvania Coal & Coke Co., capital \$50,000, incptd. by O. B. Talbot, A. M. Miner and others.

Cotton Compresses and Gins.

Tex., Bonham.—R. A. Risser, Sr., is interested in establishment of cotton compress.

Cottonseed-Oil Mills.

Ark., Helena.—Helena Cotton Oil Co. organized; E. B. Burke, Mgr.; acquired mill of Union Seed & Fertilizer Co.; install 8 presses and 11 helters purchased. Lately noted incptd. capital \$200,000. (See Machinery Wanted—Crusher.)

Ga., Montezuma.—Montezuma Mfg. Co. let contract to E. W. Rawlings to erect cottonseed-oil mill.

N. C., Clinton.—Sampson Oil & Fertilizer Co., capital \$150,000, incptd. by A. H. Herring, C. W. Petty and M. E. Britt.

Drainage Systems.

Ark., Jonesboro.—Comms. Little Bay Drainage Dist. and Whiteman's Drainage Dist. No. 20 of Craighead County let contract to Clyde A. Wall of La Grange, Ind., at \$125,000 to construct drainage system; 30 mi. canals; includes 785,500 cu. yds. excavation, floating dredge work; 87,678 cu. yds. excavation, dragline or scraper work; 10 steel "I" beam bridges, 20 and 30-ft. span, with concrete abutments; 50-ft. span steel-truss bridge, 15-ton loading, 12-ft. roadway; 160-ft. wood pile bridge; reclaim 25,000 acres; Cobb & Lee, Engrs., Suite 19, American Trust Bldg., Jonesboro. (Lately noted inviting bds.)

Mo., Chillicothe.—J. R. Campbell, John T. Milbank, Ira Hedrick and others are promoting plans for draining 72,000 acres Grand River bottom lands.

Mo., Grant City.—Worth County Drainage Dist. No. 1, W. C. Obey, Secy., will construct drainage system; main ditch and 8 lateral ditches; 961,000 cu. yds. excavation in main ditch; 32,315 cu. yds. excavation in laterals; bids until May 16; Clark E. Jacohy Engineering Co., Engr., 528 Shukert Bldg., Kansas City, Mo. (See Machinery Wanted—Drainage Construction.)

Mo., Poplar Bluff.—Inter-River Drainage Dist., A. H. Fredericks, Secy., Poplar Bluff, Mo., will construct drainage channels; 7,290,000 cu. yds. earth excavation; bids until May 14; Morgan Engineering Co., Engr., Memphis, Tenn. Previously noted. (See Machinery Wanted—Drainage System.)

N. C., Greenville.—Grindle Creek Swamp, Pitt County, G. T. Leach, Chrmn., asks bids until May 28 to construct canal; 1,500,000 cu. yds. excavation; with highway bridges; Hardin & Rivers, Engrs. Lately noted. (See Machinery Wanted—Drainage System.)

Tex., Eagle Lake.—Drainage Dist. No. 3 of

Colorado County will issue \$110,000 bonds to construct drainage system; reclaim 30,000 acres land. Address County Comr., Columbus, Tex.

Electric Plants.

Ark., Edmondson.—Edmondson Stock & Improvement Co., Box 84, W. C. Bauchman, Secy., will install electric plant in connection with laundry and ice plant. (See Miscellaneous Enterprises.)

Ark., Pine Bluff.—Pine Bluff Light & Power Co. will erect sub-station and transmission lines to supply light and power to Humphrey.

Fla., Daytona.—Daytona Public Service Co. will expend \$30,000 to complete improvements delayed by war conditions and to double boiler capacity of plant; erect brick smokestack 152 ft. high and 8 ft. in diam at top, to replace present 3 metal stacks; install two 300 H. P. water-tube. Sterling high-pressure boilers.

Fla., Jacksonville.—Southern Electric Co., capital \$10,000, Incptd.; A. K. Metz, Prest.; L. W. Sonnenberg, V.-P.; L. W. Sonnenberg, Secy.-Treas.

Fla., Miami.—Miami Beach Electric Co., capital \$250,000, Incptd.; Arthur C. Newby, V.-P.; J. H. McDuffle, Secy.-Treas.

Ga., Columbus.—Eagle & Phoenix Mills retained Lockwood, Greene & Co., Engrs., Healy Bldg., Atlanta, for brick power-house; alter existing plant.

Ga., Cornelia.—Wofford Shoal Light & Power Co., W. B. Ellard, Mgr., will enlarge plant and extend transmission lines to adjacent towns.

Ga., Cochran.—City contemplates bond issue to improve electric-light plant. Address Mayor Urdughart.

Ky., Louisville.—H. C. Tafel Electric Co. increased capital from \$75,000 to \$150,000.

Md., Church Hill.—Harry D. Massey has municipal franchise to construct electric-light system.

Md., Hillsdale.—Baltimore County Water & Electric Co., 100-02 W. Fayette St., will erect booster station on Forest Ave.; 1 story; 31x15 ft.; Wehr & Walden, Archts., 100-02 W. Fayette St.; Price Construction Co., Contr., Maryland Trust Bldg.; all of Baltimore.

Miss., Jackson.—Public Utilities Co., capital \$250,000, Incptd., by R. E. Kennington, Oscar Newton, H. V. Watkins and others.

Miss., Port Gibson.—City voted \$25,000 bonds to repair electric-light and water-works plant. Address The Mayor.

Miss., Gloster.—City invites bids until May 18 to install oil-burning engines and other machinery in electric-light and water plant. Address The Mayor. (Lately noted to have voted \$11,000 warrants.)

Miss., Senatobia.—City voted \$15,000 bonds to install electric-light plant. Address The Mayor. (Lately noted as considering bond issue.)

N. C., Benson.—City let contract to Tucker & Laxton, Charlotte, N. C., to construct electric-light system; develop 200 H. P.; cost \$40,000; Gilbert C. White, Engr., Durham, N. C. (Lately noted.)

N. C., Hickory.—Hickory Electric Co., A. A. Shuford, Jr., Mgr., will erect brick exchange building; 2 stories and basement.

Okla., Blanchard.—City voted \$15,000 bonds to construct electric-light plant. Address Board of Trustees.

Tenn., Friendship.—Marvel Mill Co. will erect brick addition to electric-light plant and mill.

Tex., Bridgeport.—Harry Hardy will organize company to establish electric-light, brick and ice plant.

Tex., South Houston.—South Houston Electric Co., capital \$2500, Incptd. by I. W. Clark and others.

Va., Richmond.—Coleman-Miller Electric Co., capital \$15,000, Incptd.; Jas. A. Miller, Prest.; G. Gravatt Coleman, Secy.

W. Va., Charleston.—Union Electric & Machine Co., capital \$25,000, Incptd. by Arthur Brounlow and others.

W. Va., Millville.—Northern Virginia Power Co. will erect addition to power-house; 1 story; 33x50 ft. and 50x57 ft.

W. Va., Spencer.—City contemplates constructing power plant. Address Mayor Wieland.

Flour, Feed and Meal Mills.

Ark., Helena.—Lewis Mill Supply Co., capital \$150,000, Incptd.; T. W. Lewis, Prest.; W. H. Howe, V.-P.; B. R. Campbell, Secy.; H. E. McRae, Treas.

Ark., Hoxie.—Hoxie Milling Co., capital \$20,000, Incptd.; C. M. Hargrove, Prest.; F. W. Cox, V.-P.; A. J. Baumann, Secy.-Treas.

Okla., Paula Valley.—M. M. Eagan & Sons plan to erect feed and molasses plant; cost \$75,000.

Tex., Beaumont.—Tyrrell Rice Milling Co. increased capital from \$70,000 to \$90,000.

Fertilizer Factories.

N. C., Clinton.—Sampson Oil & Fertilizer Co., capital \$150,000, Incptd. by A. H. Herring, C. W. Petty and M. E. Britt.

Tenn., Friendship.—Marvel Mill Co. will erect brick addition to mill and electric-light plant.

Foundry and Machine Plants.

Ark., Batesville—Hay Balers.—Junius R. Case and others organized company; capital \$200,000; will build hay balers. (See Machinery Wanted—Castings.)

Md., Baltimore—Iron Works.—Baltimore Marine Iron Works, Clement and Woodall Sts., capital \$50,000, Incptd. by Howard C. Crovo, Harry A. Stambaugh and others.

Mo., St. Louis—Transmission Equipment—Medart Mfg. Co., 3521 DeKalb Ave., will remodel plant; manufactures transmission equipment.

Mo., St. Louis—Iron Foundry.—Chester Iron & Foundry Co., Courtland St. and Iron Mountain R. R., organized; A. J. Schaelech, Prest.; Fred. A. Schoen, V.-P. and Mgr.; Edward Lins, Secy.; Wm. Schaelech, Treas.; let contract to Geo. Moeller to erect structural shop and foundry; install machinery; Archt., L. G. Haeger. (See Machinery Wanted—Machine shop Equipment.)

Mo., St. Charles—Machine Shop, etc.—Leistner & Sons, Fred. Leistner, Mgr., will erect machine shop and foundry; 1 story and basement; cost \$4000; day labor.

Okla., Bigheart—Machine Shops.—Bigheart Machine Shops, capital \$25,000, Incptd. by B. H. Elliott and others.

Tenn., Chattanooga—Arbor Presses, etc.—Chattanooga Arbor Press Co. Incptd.; F. A. Hecker, Prest.; install plant to manufacture arbor presses and twist mill grinders.

Tenn., Chattanooga—Armature.—Chattanooga Armature Works will build 1-story addition to plant in Highland Park; brick; 47x60 ft.; cost \$5000.

Tex., El Paso—Iron Works.—Moore Iron Works, capital \$25,000, Incptd. by F. B. Moore.

Va., Norfolk—Machinery.—Simon Shoe Stitch-

ing Machine Corp., capital \$300,000, chartered; Bernard Simon, Prest.; J. S. Barron, Secy.

Va., Norfolk—Machine Shop.—O. W. Guy & Co., Colonial Ave., will erect machine shop; frame; cost \$3000.

Va., Norfolk—Shoe-stitching Machinery.—Simon Shoe Stitching Machine Corp., capital \$300,000, chartered; Bernard Simon, Prest.; J. S. Barron, Secy.

Va., Petersburg—Machine Repairing, etc.—Andrews-Harris Boiler & Machine Repair Corp., capital \$15,000, chartered; W. L. Harris, Prest.; J. J. Andrews, Secy.

Va., Petersburg—Machinery.—Andrews-Harris Boiler & Machine Repair Corp., capital \$15,000, chartered; W. L. Harris, Prest.; J. J. Andrews, Secy.

Va., Charleston—Machinery.—Union Electric & Machine Co., capital \$25,000, Incptd. by Arthur Brounlow and others.

Va., Huntington—Machinery.—H. T. Lambert Co., capital \$100,000, Incptd. by H. T. Lambert (Prest. and Gen. Mgr.), R. M. Davis and H. G. Clark; offices in First National Bank Bldg.; contemplates enlargement.

W. Va., Wheeling—Castings.—Wheeling Mold & Foundry Co. will erect machine shop; 300x350 ft.; install erecting shop.

Gas and Oil Enterprises.

Ark., Fort Smith.—Sasnakra Oil & Gas Co., capital \$350,000, Incptd.; J. H. Butler, Prest., Van Buren, Ark.; Chas. W. Linthicum, V.-P., Fort Smith; Cly Wood, Secy., Van Buren, Ark.; I. H. Nakdimen, Treas., Fort Smith.

Ark., Little Rock—Oil Refinery.—Arkansas-Louisiana Oil & Refining Co., capital \$100,000, Incptd. by J. O. Banks, W. S. Smith, E. E. Newhouse and others.

Kentucky—Kentucky National Oil & Gas Co., capital \$500,000, Incptd. by Leon C. Lee, Roy L. Preston Pinney and Berme B. Bissell; all of Jamestown, N. Y.

Ky., Beattyville—Gasoline.—Kentucky Glycerine Co. plans to erect plant; cost \$12,000 to \$15,000.

Ky., Glasgow—Oil Pipe Line.—Barren County Pipe Line & Oil Co., capital \$50,000, Incptd. by Percy C. Henry, Jr., H. H. Flint and others.

Ky., Harlan—Harlan Oil Co., capital \$20,000, Incptd. by S. M. Cawood and others.

Ky., Louisville.—Phillips Oil Co., capital \$100,000, Incptd. by Frank Russell, C. B. Blakey and Robert T. Burke.

Ky., Louisville.—Metro Oil Co., capital \$900,000, Incptd. by J. C. Hanna, C. O. Brown and T. V. Brown.

Ky., Louisville.—White Plains Oil & Development Co., capital \$100,000, Incptd. by G. F. Russell, Floyd Franklin and others.

Ky., Louisville.—Superior Oil & Gas Co., capital \$150,000, Incptd. by Anthony Gerst, M. J. Hogan and A. B. Mattingly.

Ky., Paris.—Old Rosebud Oil & Gas Co., capital \$500,000, Incptd. by W. C. Bell, J. W. Young, Jr. and Harry B. Clay.

Ky., Scottsville.—Kentucky Oil & Royalty Co., capital \$200,000, Incptd. by Walker Mayfield, Scottsville; A. D. Hicks, Horse Cave, Ky., and Fred Franks, Jeffersonville, Ind.

La., Kassel—Oil Refining.—New Orleans Refining Co., Rich Airey, Prest., and A. Crone, Secy., 233 Broadway, New York, will build \$1,000,000 plant; daily output 5000 bbls. petroleum products; R. B. High, Engr., care of New Orleans Refining Co., Sellers, La.

La., Shreveport—Oil Refinery.—Banks Oil Co. plans to build oil refinery.

La., Shreveport—Victory Oil Development Co., capital \$60,000, Incptd. by William M. McKinney, R. P. Wilson and others.

Okla., Oklahoma City.—Brewers' Oil Co.,

capital \$120,000, incptd. by J. L. Lyon, Don Lawhead, Jr. and W. T. Crawford.

Okla., Oklahoma City—Oil Refinery.—Superior Oil Works, Vivian, La., capital \$300,000, will erect plant; bids now open on steel work and pumps; install 4 or 5 mi. 4-in. pipe line; construction by company; Geo. A. Todd, Engr.; main office to be located at Oklahoma City when plant is completed. (Lately noted.)

Okla., Oklahoma.—Oklahoma Natural Gas Co. increased capital from \$10,000,000 to \$15,000,000.

Okla., Tulsa.—Fournier Oil Corp., capital \$250,000, incptd. by John Fitzgerald, D. E. Abbott and M. Fitzgerald.

S. C., Charleston—Oil Refinery.—Palmetto Refining Co., capital \$125,000, incptd. by H. J. O'Neill, Montague Triest and A. R. Young.

Tenn., Knoxville.—Tennessee Six Oil Co., capital \$100,000, incptd. by J. E. Willard, C. S. McManus and H. C. Kopche.

Tex., Cameron—Oil Refinery.—Cameron Oil & Refining Co., capital \$30,000, incptd. by William Henderson and others.

Tex., Fort Worth—Oil Pipe Line.—United Producers' Pipe Line Co., M. Aiken, Prest., New York, will construct pipe line from Fort Worth to Ranger; purchased material; S. J. Graham will supervise construction.

Tex., Gorman—Oil Refinery.—Gorman Home Refining Co., J. T. Neill, Prest., acquired 25-acre site; erect oil refinery; 3000 bbls. daily capacity; capital \$375,000. (Lately noted.)

Tex., Houston—Gulf Dome Co., capital \$500,000, incptd. by Norman G. Kitterell, Jr. and others.

Tex., Houston—Oil Refinery.—Sandlin Oil & Refining Co., capital \$500,000, incptd. by Harry G. Whitney and others.

Tex., Mineral Wells.—Dalsa Oil Co., capital \$300,000, incptd. by Ira J. Kero, Roy R. Poe and N. P. Bartlett.

Tex., Ranger—Oil Refinery.—Duncan Oil & Refining Co., capital \$250,000, organized; acquired site; erect 3000-bbl. oil refinery.

Tex., San Antonio—Oil Refinery.—International Refining Co. increased capital from \$75,000 to \$100,000.

Va., Roanoke.—Potomac Oil & Gas Co., capital \$1,000,000, incptd.; J. H. Dunkley, Prest.; Edw. S. Barnitz, Secy.

W. Va., Charleston—Gasoline.—Citizens Gasoline Co., capital \$50,000, incptd. by L. G. Jeffries, W. E. Welder and Rockard Couch.

W. Va., Wellsburg.—Ohio Petroleum Co., capital \$50,000, incptd. by S. M. Warden, C. M. Warden and others.

Hydro-Electric Plants.

Tenn., Sneedville.—John N. Adams, Chemical Engr., Charleston, Tenn., will construct hydroelectric plant on Clinch River at the Auger in Hancock County; develop 4000 H. P.; operate proposed electric railway; transmission system to extend from Morristown to Moorsburg, Treadaway, Sneedville and Kyle Ford; plans \$1,500,000 expenditure. (Lately noted under Tenn., Lee Valley, to build hydro-electric plant and railway.)

Tex., Gonzales.—Gonzales Water Power Co. increased capital from \$20,000 to \$100,000.

Ice and Cold-Storage Plants.

Ark., Edmondson.—Edmondson Stock & Improvement Co., Box 84, W. C. Bauchman, Secy., will install ice plant in connection with laundry and electric plant. (See Miscellaneous Enterprises.)

Ark., Little Rock.—J. M. Ensor plans to organize company to establish ice plant; daily capacity 100 tons.

Fla., Key West.—Norberg Thompson will build ice, cold-storage and distilling plant; cost \$60,000.

Md., Baltimore.—Edward T. Boswell, 1127 Munsey Bldg., will erect icehouse, garage and greenhouse; cost \$3000 to \$4000; Jos. H. Steinacker, Archt., 28 Sanford Road, Catonsville.

Md., Baltimore.—Maryland Ice Cream Co., 17-23 E. Pratt St., acquired 4-story building 50x140 ft.; convert into refrigerating plant; build addition.

Mo., St. Louis.—St. Louis Wholesale Cut Flower Co., D. Geddis, Prest., 1410 Pine St., is having plans prepared by Grewe Construction Co., Archt., Century Bldg., to construct storage plant; 2 stories; 50x100 ft.; reinforced concrete and brick; cost \$50,000.

N. C., Elizabeth City.—Fuel & Supply Co. may install ice and cold-storage plant.

Okla., Tishomingo.—City, R. M. McCool, Mayor, voted \$50,000 bonds to construct ice and electric plant.

Tenn., Jackson.—Bearie Ice & Coal Co., capital \$200,000, incptd. by Robert L. Bearie, J. A. Williamson, W. H. Briggs and others.

Tenn., Selmer.—Selmer Produce & Supply Co. will erect cold-storage plant, warehouse and office; brick; 2 stories and basement.

Tex., Bridgeport.—Harry Hardy will organize company to establish ice, electric-light and brick plant.

Land Developments.

Fla., Hastings.—Lake Ida Pineapple Co., capital \$50,000, incptd.; F. M. Leonard, Prest.-Treas.; T. E. Woolbright, Secy.

Fla., Riviera.—H. G. Geer will develop 20 acres for suburban residential section.

Ga., Macon.—Massee Orchard Co., capital \$50,000, incptd. by W. H. Massee, W. J. Massee and others.

La., Monroe.—Waverly Planting Co., capital \$10,000, incptd. by Allen Sholars and others.

S. C., Charleston.—Palmetto Terrace Co., capital \$25,000, incptd. by R. C. Lebby and others.

S. C., Sumter.—Claremont Land Co., capital \$9000, incptd. by Perry Moses and others.

W. Va., Martinsburg.—National Orchards Co., capital \$25,000, incptd. by J. A. Butler and others.

Lumber Manufacturing.

Ala., Birmingham.—McCormick Lumber Co., capital \$10,000, incptd.; J. G. McCormick, Prest.; W. E. Seay, Secy.-Treas.

Ark., Houston.—R. A. Jones will rebuild burned sawmill.

Ga., Macon.—Bibb Lumber Co., capital \$3000, incptd. by Malcolm R. Ross and others.

Ga., Waycross.—W. D. Youmans and associates purchased plant; have planing-mill, 4-acre site; increased daily capacity by $\frac{1}{2}$, making 53,333 $\frac{1}{4}$ ft.

Ky., Frankfort.—Frankfort Lumber & Mfg. Co., capital \$32,000, incptd. by Frank McGrath and others.

Miss., Hattiesburg.—Heart Pine Lumber Co., capital \$10,000, incptd. by W. G. Gillespie and others.

Va., Richmond.—Bowles Lumber Co., capital \$25,000, incptd.; Chas. W. Selden, Prest.; J. C. Bowles, Secy.

Va., Richmond.—Bowles Lumber Co., capital \$25,000, incptd.; Chas. W. Selden, Prest.; J. C. Bowles, Secy.

W. Va., Huntington.—D. E. Hewitt, E. K. Mahan and others will organize \$500,000 com-

pany; purchased 17,000 acres virgin timber land in Logan County; will develop; construct mill, houses and commissary.

Metal-Working Plants.

Md., Baltimore—Copper, etc.—L. Ellerbeck, 29 S. Frederick St., let contract to Hicks, Tase & Norris, 106 W. Madison St., to erect addition to factory; 2 stories.

Mo., St. Louis—Fare Meters.—Fare Meter Co., capital \$100,000, Incptd. by Ollie R. Schum, Frederick J. Hell and Leo Rassieur.

Tex., Dallas—Quicksilver Furnaces.—Bell & Blake Co., 118 Field St., may install two 20-ton Scott furnaces recovering quicksilver from cinnabar ores. (See Machinery Wanted—Furnaces.)

Mining.

Ark., Blytheville—Sand.—Barfield Sand & Material Co., capital \$75,000, Incptd.; G. A. Moore, Prest.; A. B. Fairfield, V.-P.; W. O. Anthony, Secy.-Treas.

La., Baton Rouge—Gravel.—Interstate Gravel Co., capital \$40,000, incptd. by I. W. Troxel and others.

N. C., Bear Creek.—Hamilton Mining Co., capital \$50,000, incptd. by R. L. A. Hamilton.

Oklahoma—Zinc.—H. B. Reed and A. A. Haught are reported as contemplating erection of zinc mill in Oklahoma.

W. Va., Wheeling—Sand and Gravel.—Wheeling Sand & Gravel Co., capital \$100,000, incptd. by R. Walter Marshall, E. L. Fundis, both of Wheeling, and G. W. Loive, Warwood, W. Va.

Miscellaneous Construction.

Fla., Miami—Bulkhead, etc.—Miami Beach Bay Shore Co., Carl G. Fisher, Prest., will construct bulkhead, channel and fill, 7500 ft. long, 2500 ft. wide.

La., New Orleans—Shipcoaling Dock.—Dock Board, J. D. O'Reilly, Chief Engr., purchased site, having river frontage of 1200 ft. and area of 21,000 ft. in rear of levee; erect shipcoaling dock and storage facilities costing \$390,000; improvements will include storage shed 85x580 ft. with capacity of 25,000 tons coal and wharf 300x40 ft.; shed will be divided into 5 sections for storing various kinds of coal; bottoms of bins of reinforced concrete and provided with drainage system to dispose of surface water; hourly capacity for unloading coal from railroad cars to storage 250 tons, from barge to storage 300 tons, from railroad to ship 400 tons, and from storage to ship 500 tons; coal carried to and from storage by conveyor system; devices for loading ships to consist of 50-ft. wharf-tower with 50-ton hopper at top in which coal is received from loading belt; barges unloaded with stiff-leg derrick; erect track hopper 35x50 ft. for unloading cars, having space for 2 cars at one time; bucket elevator to handle coal lumps up to 150 lbs. and have hourly capacity of 200 tons; install scales, automatic and self-recording; loading devices proper are entirely of steel; general plan of construction will permit enlargement without alteration of equipment.

Miscellaneous Enterprises.

Ala., Mobile—Coffee Mill.—Mobala Coffee Co. organized; E. J. Klumpp, Mgr.; install coffee roasters, mills and mixers; purchased machinery. (Lately noted incptd., capital \$4000.)

Ark., Edmondson—Laundry, etc.—Edmondson Stock & Improvement Co., Box 84, organized; capital \$10,000; W. C. Bauchman, Secy.; erect building of ordinary construction, cost \$1000; open bids August 1; equip for general store, laundry, ice and electric plant; open machinery bids Sept. 15. (Supersedes recent item.)

Ark., Little Rock—Laundry.—Twin City Laundry, capital \$5000, incptd.; W. H.

Buchanan, Prest.; Felix M. Mason, V.-P.; D. D. James, Secy.; M. E. Jeffries, Treas.

Fla., Jacksonville—Livestock.—H. Cattle Co., capital \$100,000, incptd.; S. Summerlin, Prest.; O. R. Whitfield, V.-P.; R. L. Summerlin, Secy., Treas.

Fla., Miami—Navigation.—Miami Anglers Boat Co., capital \$50,000, incptd.; Edward S. Huff, Prest.; W. C. Graves, V.-P.; R. B. Burdine, Secy.

Fla., Oldsmar—Supplies, etc.—Oldsmar Hardware & Supply Co., capital \$10,000, incptd.; H. P. Brynes, Prest.; E. H. Ladd, V.-P. and Secy.; A. P. Avery, Treas.

Ga., Americus—Livestock.—Hale Bros. Live Stock Co., capital \$75,000, incptd.; by C. M. Hale, Americus; H. C. Hale, Huntington, W. Va., and J. P. Hale, Spring Valley, Ga.

Ga., Macon—Fire Appliances.—Fire Appliances Co., capital \$10,000, incptd. by C. J. Waxelbaum and others.

Ga., Moultrie—Construction.—Moultrie Construction Co., capital \$12,000, incptd.; C. L. Brooks, Prest.; W. G. Miller, Gen. Mgr.

Ky., Hopkinsville—Publishing.—New Age Publishing Co. incptd. by C. W. Merriweather and others.

Mo., Ladonia—Grain Elevator.—Farmers' Elevator Co. will erect grain elevator; 1 tank, 20,000 bu. daily capacity; Burrell Engineering & Construction Co., Engr., 327 La Salle St., Chicago.

Mo., Kansas City—Grain Elevator.—Farmers' Co-Operative Elevator Co., Beagle, Kan., will erect grain elevator; reinforced concrete and steel; daily capacity 10,000 bu.; Burrell Engineering Co., Engr., Security Bldg.

Mo., Kansas City—Grain Elevator.—Wells-Abbott-Neiman Milling Co., Schuyler, Neb., will erect grain elevator; reinforced concrete; cost \$50,000.

Mo., Kansas City—Grain Elevator.—Kell Milling Co., Chillicothe, Tex., will erect grain elevator; wood structure; 10,000 bu. daily capacity; Burrell Engineering Co., Engr., Security Bldg.

Mo., Sedalia.—City votes May 20 on bond issue to erect garbage-reduction plant to cost \$50,000. Address The Mayor.

N. C., Raleigh—Navigation.—Inland Navigation Co., capital \$500,000, incptd. by F. D. Doty, Frank J. Hill, both of Raleigh, and Wm. F. Miller, Norfolk, Va.

Okl., Dilworth—Grain Elevator.—C. A. Rollins, Pickham, Okla., will erect grain elevator; 22x22 ft.; 24 ft. high; construction by owner; machinery purchased. Lately noted. (See Machinery Wanted—Iron (Galvanized.)

Okl., Tulsa—Asphalt Refinery.—Highgrade Asphalt Refining Co., capital \$40,000, incptd. by Joseph F. Parker and others.

Tenn., Maryville—Livestock.—Blount County Land & Livestock Corp., capital \$50,000, chartered by S. H. Thompson, Geo. Douglas and others.

S. C., Charleston—Publishing.—Baptist Publishing Co., capital \$5000, incptd. by D. F. Thompson and J. H. Goodman.

Tex., Dallas—Drayage.—Drillers' Drayage Co., capital \$10,000, incptd. by R. J. Coke and others.

Va., Norfolk—Printing.—Ben. F. Martin, 203 Plum St., let contract to J. W. Watson to erect 1-story print shop; 20x24 ft.; cost \$3250.

Va., Norfolk—Printing.—Norfolk Ledger-District Corp., P. S. Huber, Mgr., will repair building; F. F. Ferguson, Archt., Law Bldg. (Lately noted burned.)

Va., Roanoke—Ice Delivery.—General Ice Delivery Co. increased capital from \$9000 to \$100,000.

W. Va., Fairmont—Construction.—Mononga-

hela Construction Co., capital \$50,000, incptd. by Geo. R. Barnes, H. H. Rose and others.

Miscellaneous Factories.

Ala., Birmingham—Chocolate.—Homan Chocolate Co., capital \$15,000, incptd.; H. J. Maloney, Prest., Tres.; T. T. Maloney, V.-P.

Ala., Birmingham—Candy.—Standard Candy Co., 2420 4th Ave., organized; J. C. Anderson, Mgr.; wholesale candies and soda-fountain supplies. (Lately noted incptd., capital \$20,000.)

Ala., Gadsden—Overalls.—North Alabama Mfg. Co. Increased capital from \$30,000 to \$50,000.

Ala., Mobile—Bakery.—Barker Baking Co. leased building and will establish bakery; install machinery.

Fla., Lakeland—Cigars.—Richards Cigar Factory organized by R. Q. Richards and Dr. Richards; enlarge plant; monthly capacity 500,000 cigars.

Fla., Miami—Paper Boxes.—Florida Folding Box Co., capital \$15,000, incptd.; Caspar Hefty, Prest.; J. J. Lanzet, V.-P.; L. Hefty, Secy., Treas.

Fla., Ocala—Medicine.—Gypsy Remedy Co., capital \$25,000, incptd.; P. J. Theus, Prest.; J. F. Theus, V.-P.; H. P. Billing, Secy., Treas.

Fla., St. Petersburg—Ice Cream.—Poinsettia Ice Cream Co., capital \$20,000, incptd.; T. H. Riffey, Prest., St. Petersburg; Clyde Perry, V.-P.; W. J. Barratt, Secy., both of Tampa, Fla.

Fla., Tampa—Candy, etc.—Tropical Fruit Products Co., 1706 14th Ave., organized; John F. Willson, Mgr.; remodel building; install preserving and candy-making machinery; product, chocolate-covered fruit candy, marmalades, preserves and jelly; lately noted incptd., capital \$50,000. (See Machinery Wanted—Candy-making Equipment.)

Fla., Tampa—Cigars.—Suarez-Capitano Cigar Co., Box 935, organized; erect mill-construction building; daily output 5000 cigars. (Lately noted incptd., capital \$25,000.)

Ga., Augusta—Paper Boxes.—Interstate Paper Box Co., capital \$6000, incptd. by Wm. A. Lee and others.

Ga., Macon—Ice Cream.—Odom Ice Cream Co. (C. A. Odom) will erect additions to plant; cost \$150,000.

Ga., Savannah—Ice Cream.—Chatham Creamery Co. will erect building; open bids July 1; equip to manufacture ice cream and pasteurize milk; cost of building and equipment \$30,000. (Lately noted letting contract for machinery to Dixie Engineering & Insulating Co., 717 Empire Bldg., Atlanta.)

Ky., Covington—Paint.—Allen Anti-Rust Paint Co., capital \$10,000, incptd. by J. Paul Geoghegan and others.

Ky., Newport—Baths.—X-11-O Folding Bath-room Co., capital \$6000, incptd. by John H. Price and others.

Md., Baltimore—Clothing.—Philip Kahn & Co., 11-13 S. Howard St., purchased factory at 2216-18 Fairmount Ave.; equip to manufacture clothing.

Md., Baltimore—Brooms.—S. A. Ripple & Bros., 1206 Ridgely St., will erect broom factory; 3 stories; 32x36 ft.

Miss., Hattiesburg—Boule Mfg. Co. increased capital from \$10,000 to \$30,000.

Miss., Hattiesburg.—Aladdin Co., capital \$100,000, incptd. by Jas. E. Duffey, Mrs. E. G. Sovereign and others.

Miss., Meridian—Candy.—Blue Ribbon Candy Co., capital \$5000, incptd.

Miss., Pachuta.—Pachuta Mfg. Co., capital \$10,000, incptd.; J. M. Harwell, Prest.; install excelsior machines. (See Machinery Wanted—Boiler; Engine.)

Mo., Sedalia—Bakery.—J. W. Almqvist, 12th and Ohio Sts., is having plans prepared by August Helfert, Archt., 11th and Barrett Sts., for bakery; 1 story and basement; 22x59 ft.; brick and stone; gravel roof; cost \$5000.

Mo., St. Louis.—Lyra-Ola Mfg. Co., capital \$15,000, incptd. by A. T. Webb and others.

Mo., St. Louis—Piston Rings.—Trione Piston Ring Co., Pontiac Bldg., organized; Clayton P. Miller, Prest., Mgr.; Edwin W. Lee, V.-P.; M. C. Well, Secy.; A. T. Chambers, Treas. (Lately noted incptd., capital \$10,000.)

Mo., St. Louis—Medicine.—Ar-Low Medicine Co., capital \$40,000, incptd. by Louis W. Griser and others.

Mo., St. Louis—Chemicals.—Rubitan Chemical Co., capital \$25,000, incptd. by W. E. Billheimer and others.

N. C., Charlotte—Paper.—Charlotte Paper Co., capital \$15,000, incptd. by Edward B. Kidd and others.

N. C., High Point—Creamery.—G. W. Clark will organize \$50,000 company; establish creamery.

N. C., Winston-Salem—Tobacco.—J. M. Edmunds & Co. (main office, Danville, Va.) let contract to H. A. Osborne & Co., Danville, Va., to erect 2-story, brick re-drying plant, 200x130 ft.; concrete foundation; fireproof; cost \$90,000; acquired tract with 916 ft. railway frontage.

Okl., Pauls Valley—Molasses.—M. M. Eagan & Sons plan to erect molasses and feed plant; cost \$75,000.

Okl., Oklahoma City—Creamery.—Sterling Milk Co., capital \$50,000, organized by F. C. Cryder and others; to bottle milk hermetically sealed; erect plant with daily capacity 10,000 gals.

S. C., Batesburg—Bottling.—Grey Rock Spring Co., capital \$30,000, incptd.; R. H. Timmerman, Prest.; J. B. Ballentine, Secy., Treas.

S. C., Charleston—Paper.—Charleston Paper Co., capital \$10,000, incptd.; J. H. Peele, Prest.; Matthew S. Hertz, Secy., Treas.

S. C., Gaffney—Gloves.—Dixie Glove Factory increased capital from \$5000 to \$15,000; will enlarge plant.

Tenn., Chattanooga—Moving-picture Films.—Calvert-Harrison Feature Film Corp. acquired site 250x350 ft.; will erect film factory and studio; sandstone structure; estimated cost \$50,000; plans by Alsop & Phillips, Archts.

Tenn., Jackson—Bags.—Bemis Bag Co., 601 S. 4th St., St. Louis, Mo., contemplates erecting 4-story 35x40-ft. locker towers; reinforced concrete; cost \$50,000; Stephen & Pearson, Archts., 820 Central National Bank Bldg., St. Louis.

Tex., El Paso—Overalls.—El Paso Overall Co., capital \$10,000, incptd. by C. D. McKee and others.

Tex., Fort Worth—Creosote.—Texas Creosote Mfg. Co., 111½ E. 10th St., organized; W. M. Babcock, Prest., Tulsa, Okla.; G. H. Calvin, V.-P.; E. Morrel, Treas., Mgr., both of Fort Worth; erect \$75,000 buildings; install machinery for daily output 5000 bbls. creosote; Horace La Pierre, Archt., Okmulgee, Okla.

Tex., Fort Worth—Lard, etc.—Fort Worth Rendering Co., capital \$80,000, incptd. by J. D. McCutchan, Lee L. Russell and others.

Tex., Fort Worth—Grease.—L. C. Harper and others retained D. E. Foster, Engr., Tulsa,

the Manufacturers Record is mentioned.

Oklahoma, to prepare plans to construct grease plant; purchased site.

Tex., Fort Worth—Optical Supplies.—Fort Worth Optical Co., capital \$20,000, incptd. by R. G. Barnett and others.

Tex., Pittsburg—Mattresses.—Pittsburg Cotton Oil Co., W. C. Hargrove, Prest., Treas., will rebuild 50x80-ft. galvanized-iron mattress factory; construction by own laborers; install machinery. (See Machinery Wanted—Mattress Machinery; Peanut Machinery.)

Va., Danville—Bottling.—Limko Bottling Co., capital \$10,000, incptd. by Geo. W. Woody, Prest.; William H. Harrison, Jr., Secy.

Va., Norfolk—Chemicals.—Thomas, Coblenz & Temple, capital \$25,000, incptd.; M. H. Coblenz, Prest.; W. G. Temple, Secy.

Va., Norfolk—Clifford Corp., capital \$50,000, incptd.; G. Serpell, Prest.; Paul G. Blanchard, Secy.

Va., Petersburg—Trunks and Bags.—Independent Trunk & Bag Co., Henry Plummer, Prest., will erect 1-story addition, 45x60 ft.

W. Va., Grafton—Ice Cream.—Imperial Ice Cream Co., Clarksburg, W. Va., leased building; establish ice-cream plant; install machinery.

MOTOR CARS, GARAGES, TIRES, ETC.

Ala., Birmingham—Tractors.—Mobile Tractor Co., capital \$1,000,000, incptd.; F. J. Ryan, Prest., Houston, Tex.; A. H. Wyatt, V.-P., Fort Wayne, Ind.; A. H. Herbert, Secy., St. Louis; purchased 470x300-ft. site, and 125x225-ft. building; expend \$20,000 to repair and remodel; install machinery costing \$120,000; annual capacity 3000 tractors.

Ala., Selma—Garage.—Ward Motor Co. will occupy garage to be erected by W. L. Ward & Son; brick structure.

Ark., Little Rock—Tractors.—Dill Tractor Mfg. Co., G. J. Dill, Prest., Harrisburg, Ark., increased capital to \$1,000,000; erect reinforced concrete fireproof building; acquired 10 acres for factory site; manufacture rice and wheat-cutting tractors; move office to Little Rock when plant is completed. (Lately noted.)

Ark., Little Rock—Automobiles.—T. H. Sharp, Jr., organized; T. H. Sharp, Prest.; L. L. Campbell, V.-P.; J. L. Cooper, Treas.; C. R. Pierce, Secy.

D. C., Washington—Automobiles.—Capital City Sales Co., capital \$10,000, incptd. by Harry M. Henderson and others.

D. C., Washington—Garage.—Mr. Green, 14th and W Sts., let contract to R. P. Whitty & Co. at \$75,000 to construct garage; Milburn, Heister & Co., Archts.

D. C., Washington—Garage.—N. Auth Provision Co. will erect garage; 2 stories; 61x85 ft.; cost \$20,000; Julius Wenig, Archt., 729 16th St.

D. C., Washington—Garage.—A. G. Voight, Archt., Home Bldg., will erect 2-story garage; 50x100 ft.; cost \$25,000; invites bids.

Fla., Kissimmee—Farm Tractors.—Partridge Tractor Co. (main office, Jacksonville, Fla.), capital \$100,000, incptd.; E. L. Lesley, Prest.; W. W. Carson, V.-P.; O. B. Webster, Secy., Treas.

Fla., St. Petersburg—Garage.—Ford Service Station, O. R. Albright, Mgr., 600 1st Ave. S., will erect 100x120-ft. fireproof building; cost within \$7500; open bids in Sept. Lately noted. (See Machinery Wanted—Bearing Machinery.)

Fla., St. Petersburg—Garage.—Hugh Ferguson, Lowell, Mass., let contract H. A. Farmer to erect 50x120-ft. addition to garage, including painting shop.

Fla., Tallahassee—Automobiles.—Biscayne Garage, capital \$10,000, incptd.; Chas. Brazell, Prest.; R. B. Gautier, V.-P.; Fred A. Armstrong, Secy., Treas.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Ky., Frankfort—Automobiles.—Lawrenceburg Service Motor Co., capital \$25,000, incptd. by Jas. O. Roberts and others.

Ky., Louisville—Garage.—J. B. Hillson will erect brick garage; cost \$500.

Ky., Louisville—Motor Accessories.—Moore & Stevens, capital \$15,000, incptd. by John C. Robinson and others.

Ky., Louisville—Automobile Accessories.—Starter, Lighting & Ignition Co., capital \$1500, incptd. by Addison W. Lee and others.

Ky., Louisville—Garage.—S. B. Featherstone contemplates erecting garage; capacity 250 automobiles brick and concrete.

Ky., Louisville—Garage.—H. M. Dunlop (Prest., Dunlop Milling Co., Clarksville, Tenn.) purchased site 100x200 ft.; will erect \$25,000 garage; later plans to erect 50-ft. addition for gasoline cars.

Fla., Miami—Tires, etc.—Auto Tires & Accessories Co., capital \$20,000, incptd.; F. R. Dulmage, Prest.; L. V. Turner, V.-P.; E. W. Nowlin, Secy., Treas.

Md., Baltimore—Garage, etc.—Edward T. Boswell, 1127 Munsey Bldg., will erect garage, greenhouse and icehouse; cost \$3000 to \$4000; Jos. H. Steinacker, Archt., 28 Sanford Road, Catonsville.

Md., Baltimore—Garage.—Geo. A. Blake, 1212 N. Charles St., let contract to H. E. Blake, Law Bldg., to erect 1-story garage; 55x130 ft.; cost \$20,000.

Md., Baltimore—Garage.—Henry A. Knott & Co., 2101 N. Calvert St., were not awarded contract to erect 10 garages lately noted.

Md., Easton—Garage.—Harry E. Clark will erect 1-story garage and automobile showrooms; 50x100 ft.; cost \$12,000.

Md., Hagerstown—Automobiles.—Hagerstown Welding & Auto Works, capital \$50,000, incptd. by Peter J. McCormick, J. H. Kernan and others.

Md., Williamsport—Garage.—D. S. Rector purchased 2-story building 66x196 ft.; convert into garage.

Mo., McGee—Garage.—Premier Motor Co., E. C. Ends, Gen. Mgr., will occupy garage to be erected by Mary Warren, Los Angeles, Cal.; 2 stories; fireproof.

Mo., St. Louis—Garage.—Pletsch Undertaking Co., 5966 Easton Ave., let contract to W. McDonald, Odd Fellows' Bldg., to erect 1-story garage; 40x60 ft.; cost \$4000.

Mo., St. Louis—Automobiles.—Hammond Motor Co., capital \$7000, incptd. by Charles H. Sandhaus and others.

Mo., Sedalia—Garage.—J. R. McAllister, 208 S. Orange St., is having plans prepared by T. Bast, Archt., Citizens' Bank Bldg., for garage; 1 story and basement; 91x120 ft.; cost \$25,000; day labor.

N. C., Madison—Automobiles.—Autoservice Company, capital \$25,000, incptd. by James M. Vaughn and others.

N. C., Oxford—Automobiles.—Oxford Buggy Co. will erect garage and salesroom.

N. C., Winston-Salem—Tires.—Hanes Rubber Co. is having plans prepared by Lockwood, Greene & Co., Engrs., Boston and Atlanta, Ga., for tire plant; cost \$300,000.

Okl., Enid—Garage, etc.—M. C. Garber and B. A. Garber, Washington and West Broadway, let contract to construct 50x140-ft. brick and cement building; cement floors; cost \$30,000; install electric elevator; garage, sales and repairing-rooms.

Okl., Muskogee—Garage.—Crow-Elkhart & Auburn Co., M. B. Collins, Mgr., will erect building for salesroom; 50x110 ft.

Okl., Muskogee—Tires, etc.—Gold Medal Tire & Rubber Co., capital \$10,000, incptd. by A. B. Unger and others.

S. C., Charleston—Automobiles.—Overland Harper Co., capital \$10,000, incptd. by J. C. Harper, Prest.; Robert C. Harper, Secy., Treas.

S. C., Greenville—Automobiles.—Greenville Cadillac Co., capital \$36,000, incptd. by W. H. Thompson and others.

Tenn., Chattanooga—Garage.—Poindexter & Montague let contract to A. W. Duncan, 506 Duncan Ave., to erect 2-story 59x200-ft. building; auto repair shop and supplies. (Lately noted.)

Tenn., Chattanooga—Garage.—Fred Bryan will construct 3-story fireproof garage; 75x150 ft.; cost \$50,000.

Tex., Fort Worth—Tires, etc.—Southern Tire & Rubber Co., W. H. Verner, Prest., let contract to W. C. Hedrick Construction Co., Fort Worth, to erect unit of plant; 80x329 ft.; concrete and steel; cost \$100,000; M. C. Parker, Archt.; plans to erect 4 additional similar units. (Previously noted to invite bids on erection of main plant; building to be equipped for daily capacity of 250 tires, etc.)

Tex., Galveston—Tires, etc.—Chicago Tire & Adjustment Co., capital \$10,000, incptd. by J. L. Carter and others.

Tex., Houston—Automobiles.—United Motor Co., capital \$9000, incptd. by C. G. Moffat and others.

Tex., Houston—Service Station.—Gydesan-Manfred-Cadillac Co. (C. F. Gydesan and C. W. Manfred) will occupy 75x250-ft. salesroom and service station, to be erected by Foster Building & Realty Co.; A. C. Finn, Archt.

Tex., Waco—Motor Supplies.—McCauley-Ward Motor Supply Co. increased capital from \$50,000 to \$100,000.

Va., Norfolk—Garage.—Barton Myers, Arcade Bldg., is having plans prepared by Neff & Thompson, Archt., Seaboard Bldg., to erect garage; 1 story; 52x100 ft.; brick and concrete; cost \$14,000.

Va., Norfolk—Garage.—J. D. Stens, Arcade Bldg., let contract to W. Jos. Atkinson, Arcade Bldg., to erect 2-story garage and gaso-line station; cost \$3000.

Va., Norfolk—Garages.—N. W. Hohn, 218 28th St., let contract to G. F. Cox, Chamberlain Bldg., to erect 3 garages; cost \$350 each.

Va., Norfolk—Garage.—J. L. Blassingham, 4811 Myers Ave., will erect 1-story garage; cost \$3000.

Va., Salem—Truck Bodies.—Hill-Field Body Co., incptd.; H. B. Rockhill, Prest.-Mgr.; F. C. Schofield, V.-P.; H. E. Rockhill, Secy., Treas.; erected 50x70-ft. building; character and cost of machinery undecided; daily output 10 steel truck bodies. (Lately noted capital \$50,000.)

Va., Suffolk—Garage.—T. A. Barbee will erect 1-story garage; brick; cost \$10,000.

W. Va., Charleston—Garage.—Day & Night Garage, capital \$10,000, incptd. by G. G. Lynch and others.

W. Va., Huntington—Automobiles.—Carter & Turner, capital \$25,000, incptd. by J. H. McBlane and others.

RAILWAY SHOPS, TERMINALS,

W. Va., Wheeling—Wheeling Traction Co., C. P. Billings, Gen. Mgr., contemplates erecting shops and 2-story car barns; cost \$75,000.

Road and Street Work.

Ala., Anniston—City let contract to Southern Bithulite Co., Birmingham, Ala., to repair 1½ mi. bitulite paving; cost \$20,000; C. W. Cooper, Engr. (Bids lately noted.)

Ala., Attalla.—City will pave Fifth Ave. from Sixth St. to city limits; cost \$60,000; City Engr. will invite bids. (Previously noted as having plans prepared by Ernest Smith

Co., Gadsden, and Percy Todd, Engr., Attala, for paving 1 mi. of Fifth Ave. with asphalt.)

Ala., Birmingham.—Jefferson County, Jerry W. Gwin, Prest. Board of Revenue, will construct 30 mi. paved roads; \$300,000 available; asked Federal aid for equal amount; S. R. Batson, Engr.

Ala., Enterprise.—City let contract to Southern Clay Mfg. Co., Volunteer State Life Insurance Bldg., Chattanooga, Tenn., to pave 5000 sq. yds. of Lee and Carmichael Sts. with vitrified brick on sand and cement base.

Ala., Scottsboro.—Jackson County Commrs. let contract at \$30,000 to construct 6 mi. macadam road over Woodville-Limrock Highway.

Ark., Ashdown.—Little River County Commrs. let contract to Phoenix Company, Fort Smith, Ark., at \$61,000 to construct 9½ mi. road from Foreman to Laynesport.

Ark., Augusta.—Woodruff County Commrs. will construct cross-county road from Jelks, through McCrory, to Cross County line; \$150,000 bonds available.

Ark., Danville.—Yell County, Road Improvement Dist. No. 11, let contract to Louis Rich Construction Co., Plainview, Ark., to construct 60 mi. asphalt macadam highway, including steel bridges, culverts, earthwork, etc.; J. R. Packard, Engr., Plainview; bids lately noted. (See Machinery Wanted—Road Construction.)

Ark., Harrison.—Boone County Commrs. will build 37 mi. Jefferson Highway; probably by day labor; cost \$100,000; Pritchett & Hight, Engrs., Walnut Ridge, Ark. (Lately noted.)

Ark., Jonesboro.—Lake City, Nettleton and Bay Road Improvement Dist. No. 1 of Craighead County, E. E. Randolph, Secy. Commrs., let contract to J. E. Edwards Construction Co., Little Rock, at \$430,830.40 to grade 24.66 mi. of road with drainage, culverts and steel stringer bridges; 167,000 cu. yds. excavation, 1149 cu. yds. concrete culverts and bridge abutments, 101,640 lbs. steel "I" beams; Klyce & Kackley, Engrs., 721 Fourth and First National Bank Bldg., Nashville, Tenn. (Lately noted inviting bids.)

Ark., Marked Tree.—Poinsett County, Ozark Trail Road Improvement Dist., W. H. Dilatash, Secy., ask bids until May 27 to construct 16 mi. earth road embankment; including 227,200 cu. yds. earth excavation, 21 acres clearing, 36 acres clearing and grubbing, 1340 ft. 18-in. corrugated pipe, 450 ft. 24-in. corrugated pipe, 90 cu. yds. plain concrete headwalls; Morgan Engineering Co., Engr., Memphis, Tenn. (See Machinery Wanted—Road Construction.)

Ark., Morrilton.—Conway County, Road Dist. No. 4, will construct 25 mi. road running north to Plumerville; cost \$250,000; Parkes Engineering Co., Engr., Pine Bluff, Ark.

Ark., Pine Bluff.—Jefferson County, Leachville-Manilla-Blytheville Dist., issued \$800,000 bonds for road improvements.

Ark., Sheridan.—Grant County Road Improvement Dist. Commrs. will construct 19.73 mi. 6-in. gravel road; 10 ft. wide on 20-ft. base; J. P. Harper, Engr., Reigler Bldg., Little Rock.

Ark., Star City.—Lincoln County, Douglas-Gould-Star City Road Improvement Dist., W. E. Massey, Chrmn., will issue \$55,000 bonds for road construction.

D. C., Washington.—District Commrs., 511 District Bldg., will pave streets with asphalt; bids until May 21. (See Machinery Wanted—Paving.)

Fla., Plant City.—City, Claud B. Root, Mayor, votes June 24 on \$70,000 bonds for street paving.

Fla., Winter Park.—City will construct 19,000 yds. grouted brick paving, 18,000 lin. ft. 4x10-in. cement curbing and 2500 ft. storm sewer; late noted.

bids opened May 5; Dudley Matthews, Clerk of Council. Lately noted as contemplating paving to cost \$50,000. (See Machinery Wanted—Paving.)

Ga., Camilla.—City contemplates paving main streets; J. B. McCrary Co., Engr., Atlanta.

Ga., Clarksville.—Habersham County, J. A. Robertson, Ordinary, will construct 15-ft. concrete road from Cornelius to Clarksville; cost \$10,000.

Ga., Cochran.—City contemplates bond issue to pave streets. Address Mayor Urquhart.

Ga., Dawson.—Terrell County Commrs. will consider calling election to vote on \$150,000 bonds to construct roads.

Ga., Ellijay.—Gilmer County Commrs. contemplate election on \$200,000 road-construction bonds.

Ga., Ellijay.—City, Clark Ray, Mayor, will construct .56 of mi. concrete road; \$16,000 available; open bids about May 15; Johnston & Morgan, Engrs., Flatiron Bldg., Atlanta; city voted \$8000 bonds for road construction. (See Machinery Wanted—Road Construction; Road Material; Concrete Mixers; Crushers.)

Ga., Fort Valley.—City voted \$24,000 bonds for 20,000 yds. street paving; expend \$72,000, two-thirds to be contributed by property owners; H. C. Neil, Mayor. (Previously noted to vote.)

Ga., Folkston.—Charlton County Commrs., H. J. Davis, Chrmn., contemplate building 20 mi. hard-surfaced road, Central Dixie Highway; bond issue pending for \$150,000.

Ga., Griffin.—City, E. P. Bridges, Mgr., ask bids until June 3 to grade, curb, drain and pave streets with vitrified brick, concrete, bituminous concrete or patented pavement; 10,000 cu. yds. earth excavation; Solomon-Norcross Co., Consult. Engr., 1625 Candler Bldg., Atlanta. (See Machinery Wanted—Paving.)

Ga., Jefferson.—Jackson County, State Highway Dept., let contract to M. C. Aiken & Sons, Decatur, Ga., to construct chart road; cost \$29,533.45; A. P. Henderson, Engr., Athens, Ala. (Lately noted ordering bond vote.)

Ga., Madison.—Morgan County Commrs. ordered vote May 20 on \$325,000 bonds to construct roads.

Ga., Monroe.—Walton County voted \$200,000 bonds to grade and top soil roads. (Supercedes recent item.) Address County Commrs.

Ga., Newnan.—Coweta County voted \$480,000 bonds to improve roads. Address County Commrs.

Ga., Statesboro.—Bullock County Commrs. ordered vote June 5 on \$400,000 bonds to construct roads.

Ga., Thomasville.—Thomas County voted \$700,000 bonds to construct roads and bridges; S. L. Head, Clerk Commrs. Roads and Revenues. (Lately noted to vote.)

Ga., Valdosta.—Lowndes County Commrs. ordered vote May 28 on \$500,000 bonds for road construction. (Lately noted.)

Ga., Washington.—Wilkes County Commrs. ordered vote June 11 on \$300,000 bonds to construct roads. (Lately noted.)

Ky., Owensboro.—City will surface sections of Fifth, Fourth, Ninth, Second and Allen Sts.; 24,000 sq. yds. macadam streets with bituminous concrete or bitulithic construction; bids opened May 7; Jno. C. Calhoun, Mayor. (See Machinery Wanted—Paving.)

La., Columbia.—Caldwell Parish let contract C. A. Reese at \$65,000 to construct 15 mi. of gravel road. (Lately noted to vote May 20 on \$400,000 bonds to construct roads.)

La., Marksville.—Avoyelles Parish Police Jury votes June 20 on \$1,500,000 bonds for road construction; changed date from April 26, as late noted.

La., Winniboro.—Franklin Parish voted \$750,000 bonds for highway improvements; with Government and State aid will have \$1,500,000 available. Address Prest. Police Jury.

Md., Baltimore.—Fairmont Land Co. let contract to A. F. Fedell Co., 403 Vicker Bldg., to construct sidewalks, curb, gutters and paving; cost within \$10,000; J. Spence Howard, Engr., 12 E. Lexington St.

Md., Baltimore.—City let contract Arundel Construction Co., Pier 2, Pratt St., at \$50,000 for alley paving.

Md., Baltimore.—Morgan Park Co. let contract to H. O. Firor, 1707 Pratt St., to construct roads in development of Morgan College site; 5000 to 10,000 cu. yds. excavation; J. Spence Howard, Engr., 12 E. Lexington St.

Md., Baltimore.—Owners' Realty Co. let contract to Zink Brothers, 108 N. Calverton Road, for 10,000 yds. grading on Woodberry Ave.; J. Spence Howard, Engr., 12 E. Lexington St.

Md., Chestertown.—State Roads Comm., Garrett Bldg., Baltimore, let contract to Kaufman & Co., Federalsburg, Md., at \$76,220 for Rock Hall-Swan Creek road construction; 3.03 mi. long by 14 ft. wide. (Lately noted inviting bids.)

Md., Cumberland.—City will curb and pave 8 streets; 9135 ft. concrete curbing; 7050 sq. yds. concrete paving; 930 sq. yds. wood-block paving; 14,200 sq. yds. brick paving (semi-monolithic), miscellaneous sewer work, etc.; bids until May 15; alternate bids on 11,220 sq. yds. sheet asphalt paving; Ralph L. Rizer, City Engr., City Hall. (See Machinery Wanted—Paving.)

Md., Ellicott City.—State Roads Comm., Garrett Bldg., Baltimore, let contract to Clarendon, Johnston & Co., Garrett Bldg., Baltimore, at \$89,873 for Clarkeville pike construction; 2.51 mi. long by 20 ft. wide. (Lately noted inviting bids.)

Md., Frederick.—State Roads Comm., Garrett Bldg., Baltimore, let contract to Fisher & Carozza, Calvert Bldg., Baltimore, at \$89,895 for Knoxville to Harper's Ferry road construction; 3.51 mi. long by 20 ft. wide. (Lately noted inviting bids.)

Md., Indian Head.—Bureau of Yards and Docks, Navy Dept., Washington, D. C., let contract to Sutton & Carsen, 9th and Simpson Sts., Ocean City, N. J., at \$66,598 to construct roads.

Md., Westminster.—State Roads Comm., Garrett Bldg., Baltimore, let contract to Thomas, Bennett & Hunter, Westminster, at \$53,644 for Littletown pike construction; 2.01 mi. long by 20 ft. wide. (Lately noted inviting bids.)

Miss., Monticello.—Lawrence County, Separate Road Dist. No. 4, will issue May 5 \$75,000 bonds for road improvements; J. H. Teunissen, Clerk Board Supvrs.

Miss., Winniboro.—Town let contract to George Rusher, Natchez, Miss., to construct concrete sidewalks; cost \$10,000.

Mo., Centralia.—Board of Aldermen plan 10 to 15 blocks of brick paving; probably sidewalks.

Mo., Jefferson City.—State Senate authorized \$60,000,000 bonds to construct hard-surfaced roads; Frederick D. Gardner, Governor.

Mo., Kansas City.—City let contract Foxhall P. McCormack at \$94,883.30 to surface McGee Road, from Pershing Road to 30th St.; 4-in. vertical fiber vitrified brick, with asphaltic cement binder; 27,740 sq. yds. paving, including 100 cu. yds. concrete at street intersections.

Mo., Platte City.—City will pave 3 blocks of streets; bids opened May 8; E. F. Ross, City Clerk. (See Machinery Wanted—Paving.)

Mo., Sedalia.—Pettis County Commrs. order-

ed vote for June 2 on \$80,000 bonds to improve roads.

Mo., St. Louis.—City plans to widen 3 mi. of 12th St. and 1 mi. of Washington Ave.; both from 60 to 80 ft.; cost of Washington Ave. widening, \$568,000; W. W. Horner, City Engr.

N. C., Roxboro.—Person County, Central Highway Coms., M. R. Long, Chrmn., will issue \$225,000 bonds for road improvement.

N. C., Jefferson.—Ashe County voted \$600,000 bonds to construct roads. Address County Comms.

N. C., Jefferson.—Ashe County Good Roads Coms., voted \$600,000 bonds for road construction; asks bids.

N. C., Smithfield.—Johnston County, Banner Township, will construct roads; bids opened May 3; Yancey Moore, Chrmn. Road Trustees. (See Machinery Wanted—Road Construction.)

N. C., Newland.—Avery County Turnpike Bond Co., F. M. Richards, Jr., Supt., will reconstruct old pike from Banner Elk to Elk Park; 10 mi. building up and surfacing; \$5000 available. (See Machinery Wanted—Crushers.)

N. C., Statesville.—City ask bids until May 20 to construct 100,000 yds. street paving and 10,000 yds. concrete sidewalks; L. F. Ervin, Clerk; supersedes recent item. (See Machinery Wanted—Paving.)

Okla., Duncan.—City contemplates paving streets in connection with storm sewers; John R. March, Engr. (See Machinery Wanted—Paving Materials.)

S. C., Abbeville.—City votes May 13 on \$90,000 bonds to pave streets and sidewalks; J. Moore Mars, Mayor.

S. C., Chester.—Chester County Highway Coms. will grade and topsoil 9.46 mi. of Saluda Road, between Chester and York County line; 44,000 cu. yds. excavation; 25,500 cu. yds. topsoil; 240 cu. yds. concrete and pipe culverts; bids until May 15. (See Machinery Wanted—Road Construction.)

S. C., Columbia.—City will construct 3 mi. sidewalk and storm drains; \$15,000 available; work by city force; T. Keith Legare, Engr. (Lately noted.)

S. C., Great Falls.—Great Falls Farms Co. ask bids until May 12 to grade road from Great Falls to Waterlee; 10 mi. and 15 mi. section; Alfred T. Jones, Engr. Roads and Bridges. (See Machinery Wanted—Road Construction.)

S. C., Newberry.—Newberry County Comms. will grade and topsoil 5.63 mi. of Piedmont Highway, between Little Mountain and Prosperity; 28,000 cu. yds. earth excavation; 13,200 cu. yds. topsoil and pipe culverts; bids until May 13. (See Machinery Wanted—Road Construction.)

S. C., York.—City, J. W. Johnson, Mayor, will construct asphalt streets; \$100,000 available; Klutz & Smith, Engrs., Concord, N. C.; voted \$50,000 bonds. (Lately noted to vote on bonds.)

Tenn., Nashville.—City will construct bituminous, asphaltic concrete, recut granite block, wood block and macadam paving (oil and gravel surface treatment); bids until May 20; William Gupton, Mayor. (See Machinery Wanted—Paving.)

Tex., Anahuac.—Chambers County defeated \$55,000 bond issue for road construction in Dist. No. 4. Address County Comms.

Tex., Beaumont.—Jefferson County Comms., State Highway Dept., rejected bids to construct 16 mi. road; concrete base with asphalt top; D. R. Thornton, Engr. (Bids lately noted.)

Tex., Beeville.—Bee County Comms. will issue \$600,000 bonds to construct highways.

Tex., Brownwood.—Brown County will grade and surface with stone or gravel 10.98 mi. of highway, bituminous surface treatment, and placing 700 cu. yds. concrete for drainage structures; bids until May 12; R. E. Lee, County Judge. (See Machinery Wanted—Road Construction.)

Tex., Cameron.—Milam County, Road Dist. No. 25, will vote on \$50,000 bonds to construct roads. Address County Comms.

Tex., Clarendon.—Donley County Comms. ordered vote on tax to construct roads and bridges.

Tex., Columbus.—Colorado County will construct 17 mi. road; State Highway No. 3; 34,000 cu. yds. excavation; 24,000 cu. yds. embankment; 9 mi. grader work; 38,000 cu. yds. gravel, etc.; bids until May 15; John Hastedt, County Clerk. (See Machinery Wanted—Road Construction.)

Tex., Dallas.—City Comms. let contract Texas Bitulithic Co., Dallas, at \$21,353.90 to pave Shelby St., from Dickason to Maple Ave., and to Standard Engineering & Construction Co. of Dallas at \$30,085.73 to pave Peak St., from East Side to Forney Ave.

Tex., Daingerfield.—Morris County let contract to Smith Brothers, Crockett, Tex., to construct 10.7 mi. State Highway No. 1, sand-clay and graveled surfaced; \$75,000 available; M. L. Minter, Engr. (Bids lately noted.)

Tex., Denton.—Denton County Comms., E. D. Key, Judge, will construct 3 State Highways and lateral roads; macadam with surface treatment and gravel; concrete bridges and culverts; cost \$1,780,000; Bryant & Huffman, Engrs., 217 Littlefield Bldg., Austin, Tex. (Lately noted to vote bonds.)

Tex., Fort Worth.—City let contract Texas Bitulithic Co., Dallas, Tex., to pave sections of Terrell, Roberts and Galveston Aves.

Tex., Gilmer.—Upshur County voted \$1,000,000 bonds for road construction. Address County Comms.

Tex., Haskell.—Haskell County will construct State Highway No. 39; 6882 cu. yds. earth excavation; 30,862 cu. yds. borrowed excavation; 10.1 mi. light grading; 41.25 cu. yds. concrete, etc.; bids opened May 7; J. P. Kennard, County Judge; O. L. Leonard, County Engr. (See Machinery Wanted—Paving.)

Tex., Hillsboro.—Hill County, Precinct No. 1, voted \$10,000 bonds to construct roads. Address County Comms. (Lately noted as contemplating vote.)

Tex., Hillsboro.—Hill County, Itasca Dist., voted \$350,000 bonds to construct roads. Address County Comms. (Lately noted to vote.)

Tex., Karnes City.—Karnes County Comms. postponed for 60 days election lately noted to be held May 3 to vote on \$1,000,000 bonds to construct and purchase roads.

Tex., Kaufman.—Kaufman County, Terrell Dist., voted \$500,000 bonds to construct roads. Address County Comms.

Tex., Nacogdoches.—Nacogdoches County, J. M. Marshall, Judge, voted \$800,000 bonds for road improvement.

Tex., Palestine.—City will construct 5 mi. cement sidewalks. Address The Mayor.

Tex., Pharr.—City issued \$10,000 warrants for street improvements. Address The Mayor.

Tex., Quitman.—Wood County, Precinct No. 7, voted \$100,000 bonds to improve Highways Nos. 14 and 19. Address County Comms.

Tex., Sinton.—San Patricio County, Sinton Road Dist., voted \$25,000 bonds to construct roads. Address County Comms. (Lately noted to vote.)

Tex., Waxahachie.—City will construct 66,000 sq. yds. paving and 27,000 lin. ft. curb or curb

and gutter; bids until May 9 on vertical fiber brick on 5-in. concrete base; asphaltic concrete on 5-in. concrete base; 1 and 2-course concrete, 6 in. thick; R. T. Smith, City Engr. (See Machinery Wanted—Paving.)

Tex., Weatherford.—Parker County voted \$800,000 bonds to construct roads; B. C. Holfield, County Clerk. (Supersedes recent item.)

Tex., Woodville.—Tyler County voted \$800,000 bonds to construct roads. Address County Comms. (Lately noted to vote.)

Va., Chatham.—Pittsylvania County Supvrs. let contract to Mr. Chandler to construct 10 mi. of road from Gretna east; cost \$30,000; probably extend road 10 mi. further.

Va., Houston.—Halifax County Comms. let contract to W. T. Jones, 216 Tenth St., Lynchburg, Va., to construct 3½ mi. 16-ft. concrete road from Houston to South Boston; \$75,000 available. (See Machinery Wanted—Trucks, Crusher, Steel Forms, Shovel, Pump, etc.)

Va., Salem.—State Highway Coms., Richmond, let contract Preston, Overstreet & Guy at \$30,000 to construct 2½ mi. of water-bound macadam road.

W. Va., Lewisburg.—Greenbrier County, Blue Sulphur Dist., will construct 15 to 18 mi. water-bound macadam road, costing \$10,000; F. K. Raderm, Engr.

W. Va., Lewisburg.—Greenbrier County, Irish Point Dist., will construct 12 mi. of road; voted bonds.

W. Va., Wayne.—Wayne County will construct 25 mi. of road; 16 ft. wide; brick, concrete or bituminous; cost \$1,150,000; A. Leving, County Engr.

Va., Rocky Mount.—City will construct 7763 ft. 6-in. macadam 18-ft. roadway; 3500 cu. ft. excavation; 4400 tons stone; C. S. Greer, Mayor, receives bids until May 10. (See Machinery Wanted—Paving.)

W. Va., Buckhannon.—Upshur County Comms. have plans approved by State Road Coms., Charleston, W. Va., for 5 mi. road between Buckhannon and Lorenz; cost \$128,000.

W. Va., Cameron.—City contemplates \$60,000 bond issue for street paving, sewer construction, etc. Address The Mayor.

W. Va., Keyser.—Mineral County Comms., Elk Dist., voted \$137,000 bonds for road improvements.

W. Va., Moundsville.—City will pave Ash Ave., from 1st to 2d Sts., and Tomlinson Ave., from 7th to 8th Sts., with vitrified brick or block; bids until May 23; L. L. Stidger, City Clerk. (See Machinery Wanted—Paving.)

Sewer Construction.

D. C., Washington.—Government let contract Chas. H. Tomkins, 1833 Third St., Washington, at \$4900 to construct sewerage, etc., at Arlington Memorial Amphitheater.

Ga., Cochran.—City contemplates bond issue to construct sewer system. Address Mayor Urquhart.

Md., Baltimore.—Morgan Park Co. let contract to A. F. Fedeli, 403 Vickers Bldg., at \$8000 to construct sewers; J. Spence Howard, Engr., 12 E. Lexington St.

Mo., Holden.—City is having plans prepared for sanitary sewer system; Archer & Stevens, Engrs., 609 New England Bldg., Kansas City; O. G. Boyce, Mayor.

Okla., Duncan.—City, John R. March, Engr., will construct 35,000 ft. of 6, 8 and 10-in. lateral sewers; open bids probably before June 1. (Lately noted.)

Okla., Frederick.—City will construct sanitary sewers; issue \$150,000 bonds; D. W. Womack, City Clerk.

Okla., Pauls Valley.—City is revising plans for improvements to sewer system and water-

works; W. E. Moore, Engr., 1006 Oil Exchange Bldg., Oklahoma City. (Previously noted.)

Tex., Dallas.—City Comms. let contract Texas Bitulithic Co., Dallas, at \$6300 to construct storm sewer on Oakenwald St. from Beckley to Plowman St.

Tex., De Leon.—City will construct sanitary sewer system and disposal plant; former requires 31,700 ft. 6-in., 900 ft. 8-in. and 1450 ft. 10-in. pipe, 40 manholes; latter, 2300 ft. 8-in., 6570 ft. 6-in., 4230 ft. 4-in. cast-iron pipe, 9400 ft. 2-in. block pipe, etc.; bids opened May 5; Henry Exall Elrod Co., Engr., Dallas, Tex.; A. M. Pate, City Secy. (See Machinery Wanted—Sewer Construction.)

Tex., New Boston.—City, Harvey Miller, Secy., engaged engineer to survey for sewer system.

W. Va., Cameron.—City contemplates \$60,000 bond issue for sewer construction, street paving, etc. Address The Mayor.

Shipbuilding Plants.

Ala., Mobile—Wooden Ships.—Government will build 10,000-ton dry docks at Mobile, New Orleans and Galveston; W. T. Donnelly, Consit. Engr., New York.

Ga., Savannah—Wooden Ships.—John Rourke & Sons, capital \$300,000, Incptd. by John Rourke, Jas. A. Rourke and John Rourke, Jr.

La., New Orleans—Wooden Ships.—Government will build 10,000-ton dry docks at New Orleans, Mobile and Galveston; W. T. Donnelly, Consit. Engr., New York.

Md., Havre de Grace—Wooden Barges.—Delbert Barge Building Co. contemplates enlarging plant.

N. C., Newbern—Wooden Ships.—Newport Shipbuilding Corp. will install underwater launching ways; proposals invited; diving equipment required.

S. C., Charleston—Drydock.—Navy Dept., Washington, D. C., will erect concrete drydock at Charleston Navy-yard; length 1030 ft.; width at bottom 110 ft. and at top 127 ft.; distance from cellar dock to mean high water, 43 ft. 6 in.; preliminary appropriation \$1,500,000; estimated cost of completed project \$4,000,000; bids until May 19; drawings and specification No. 3858 from Bureau and Rear-Admiral B. C. Bryan, Commandant of Charleston Navy-yard. (See Machinery Wanted—Drydock.)

Tenn., Chattanooga—River Steamers.—Tennessee River Navigation Co., E. D. Bass, Gen. Mgr., will lease shipyard to be erected by local corporation; plant will comprise 5 ways; build and repair river steamers.

Tex., Galveston—Wooden Ships.—Government will build 10,000-ton dry docks at Galveston, Mobile and New Orleans; W. T. Donnelly, Consit. Engr., New York.

Telephone Systems.

Md., Frostburg—Alleghany County Telephone Co., capital \$200,000, Incptd. by Olin R. Hice, Harry B. Colborn and Chas. G. Watson.

S. C., Greenville.—Southern Telephone Co. will remodel building; convert 3d floor into restroom.

Va., Marion—Smyth County Telephone Co., capital \$50,000, Incptd.; Q. A. Eller, Prest.; J. U. Wolfe, Secy.

W. Va., Fairmont—Amos Telephone Co., G. R. Miller, Prest., applied for franchise to construct telephone exchange.

Textile Mills.

Ala., Cordova—Cotton Goods.—Indianhead Mills having plans prepared by Lockwood, Greene & Co., Engrs., Healy Bldg., Atlanta, Ga., for 3-story reinforced concrete cotton-building.

N. C., Brookford—Convertible Cotton Cloth. Brookford Mills Co. will build additional weave shed; install additional new machinery.

N. C., Durham—Hosiery.—Durham Hosiery Mills will erect dyehouse; 3 stories; 50x65 ft.; install dyeing apparatus.

N. C., Gastonia—Cotton Goods.—Geo. R. Spencer, W. H. Adams, J. M. Holland and others will build mill.

N. C., Kings Mountain—Combed Yarns.—Sadie Cotton Mills Co. (lately noted Incptd. with \$150,000 capital) organized; L. A. Kiser, Prest.; R. L. Mauney, V.P.; D. C. Mauney, Secy.-Treas.; erect building; 100x200 or 220 ft.; brick; cement floor; cost \$25,000; install 5440 spindles; cost of equipment, \$125,000; electric power 250 to 300 H. P.; manufacture 60s to 80s combed peeler yarns. (See Machinery Wanted—Lumber; Motors; Tank and Tower; Pipe.)

W. Va., Martinsburg—Woolen Cloth.—Berkeley Woolen Co. will build 160x60-ft. standard brick mill-construction addition costing \$120,000; has let contract; install 7240 spindles, 54 looms, etc., costing \$60,000; ordered this new equipment; 250 K. W. electric drive with belt transmission; P. O. Keilholz, Engr.-Archt., Continental Bldg., Baltimore, Md. (Super-sedes previous item.)

N. C., Gastonia—Combed Yarns.—Victory Yarn Mills Co. chartered with \$500,000 capital by C. B. Armstrong and others; build 12,000 to 15,000-spindle mill, spinning combed yarns; purchased 65-acre site on Carolina & Northwestern Ry. (C. B. Armstrong and others lately noted to build mill.)

N. C., North Wilkesboro—Underwear.—Athletic Underwear Co., capital \$50,000, Incptd. by F. P. Blair, Johnson J. Hayes and others.

Water-Works.

Ga., Cochran.—City contemplates bond issue to improve water-works. Address Mayor Urquhart.

Ky., Ashland.—City is having plans prepared by Alvord & Burdick, Engrs., 8 S. Dearborn St., Chicago, for filtration plant; brick and reinforced concrete; capacity 2,000,000 gals.; E. C. Means, Chrmn. Water Comms. (Previously noted.)

Ky., Dawson Springs.—Illinois Central R. R., C. M. Kittle, Federal Mgr., Chicago, let contract Railroad Water & Coal Handling Co., Chicago, to construct concrete dam across Tradewater River to supply water for pumping station; dam of concrete, 14 ft. high, 125 ft. long and 10 ft. thick, costing \$6000; also let contract to same company to erect pumping station 27x27 ft., 1 story, brick, with concrete foundation and slate roof; machinery to consist of two 25 H. P. fuel-oil engines having belt connections with two 500 R. P. M. centrifugal pumps, discharging through 3000 ft. of 10-in. cast-iron main pipe into 100,000-gal. tank. (Lately noted.)

Md., Baltimore.—City will purchase additional site and enlarge filtration plant at Loch Raven; double capacity; present daily water consumption 110,000,000 gals.; Walter E. Lee, Water Engr.

Miss., Gloster.—City invites bids until May 18 to install oil-burning engines and other machinery in water and electric-light plant. Address The Mayor. (Lately noted to have voted \$11,000 warrants.)

Miss., Port Gibson.—City voted \$25,000 bonds to repair water-works and electric-light plant. Address The Mayor.

Mo., Kansas City.—City opened bids to construct 1,000,000-gal. reinforced concrete stand-pipe at 75th and Holmes Sts. and in North Terrace Park; Pratt-Thompson Construction Co. is lowest bidder for former at \$33,311 on

type "A" and \$35,726 on type "B"; on latter, at \$33,211 on type "A" and \$34,398 on type "B". (Lately noted inviting bids.)

Okl., Blanchard.—City voted \$45,000 bonds to construct water-works. Address Board of Trustees.

Okl., Comanche.—City will build filtration plant; daily capacity 40,000 gals.; reinforced concrete dam across Cow Creek; invites plans and specifications until May 5; F. G. Howard, City Clerk.

Okl., Pauls Valley.—City is revising plans for improvements to water-works and sewer system; W. E. Moore, Engr., 1006 Oil Exchange Bldg., Oklahoma City. (Previously noted.)

Tex., Eastland.—City Comms. contemplate constructing 1,000,000-gal. reservoir. (Noted in March to have voted \$100,000 bonds.)

Tex., New Boston.—City, Harvey Miller, Secy., contemplates installing air lift pump for deep well, capacity 5000 gals. per hour.

Woodworking Plants.

Ark., Hope—Cooperage.—J. M. Sanford and William Fletcher are planning to erect cooperage plant.

Ark., Little Rock—Hardwood Flooring.—E. L. Bruce Co. increased capital from \$10,000 to \$50,000.

Ga., Waycross—Boxes, etc.—Enterprise Lumber & Mfg. Co. purchased planing-mill; equip to manufacture crates, boxes, etc.

N. C., Lexington—Chairs.—Hoover Chair Co. purchased plant and will equip to manufacture chairs. (Lately noted under N. C., Salisbury.)

Va., Wytheville—Cooperage.—Wythe Cooperage Co., capital \$15,000, Incptd.; G. B. Morehead, Prest.; S. B. Campbell, Secy.

Fire Damage.

Ala., Eutaw.—A. N. Shelton's livery stable and other buildings on Court Square; loss \$75,000.

Ala., Linesville.—Linesville Fertilizer Co.'s plant; loss \$75,000.

Ala., Mobile.—A. J. Wildman's residence; dwelling occupied by F. C. Blackstone and J. R. Michell; loss \$13,000.

Ala., Tuscaloosa.—Rufe Hubbard's sawmill; loss \$12,000.

Ark., Fort Smith.—Industrial Laboratories Co.'s plant; C. A. Bryant's building; Knowles Storage Co.'s building; Johnson & Hunt's grocery; loss \$150,000.

Ga., Abbeville.—Paxton Drug Co.'s building, owned by E. A. Moody; Allen Parlor Grocery Store; P. I. Haire & Co.'s store.

Ga., Americus.—W. B. Haynes' barn, 3½ mi. from Americus.

Ga., Atlanta.—Sterchie Furniture & Carpet Co.'s store building; estimated loss \$75,000.

Ga., Maysville.—Maysville Oil Mill's oil tanks.

Md., Ruxton.—Shirley Carter's residence; loss \$20,000.

Md., Ruxton.—Residence of Alexander C. Nelson, 33 Stock Exchange Bldg., Baltimore; loss \$10,000.

Miss., Poplarville.—Boys' dormitory of Pearl River Agricultural High School; loss \$20,000.

N. C., Fallston.—R. A. Lackey's residence; Stamey Bros.' warehouse; loss \$14,000.

N. C., Greensboro.—Texas Oil Co.'s storage warehouse.

N. C., Wadesboro.—Seaboard Air Line Ry.'s freight station; W. D. Fauchette, Chief Engr., Norfolk, Va.; warehouses of Bialock-Allen Co., Leak & Marshall and Virginia-Carolina

Chemical Co.; Wadesboro Marble Works' plant; loss \$150,000.

S. C., Fingerville.—School building. Address School Trustees.

Tenn., Jackson.—Pope High School. Address School Board.

Tex., Bryan.—Bryan Compress Co.'s warehouse; loss \$10,000.

Tex., Sweetwater.—S. D. Myers Saddle Shop's building; loss \$25,000.

Tex., Willis.—Lewis Runnell's store; Masonic Hall; T. E. Dardin's store; M. J. Graybill's store; J. Przyant's store; loss \$50,000 to \$75,000.

Va., Boyce.—Residence on Prospect Hill farm, owned by Key Meade.

Va., Norfolk.—Hyslop's Cleaning Co.'s plant; loss \$20,000.

W. Va., Fairmont.—Union Club, owned by Joe Berardelli; loss \$12,000 to \$15,000.

vapor heat; vacuum cleaning system; water-cooling devices; cost \$600,000.

D. C., Washington.—Liberty Savings Bank, 1410 New York Ave., has plans by Holmes & Winslow, 110 W. 40th St., New York, for bank building at 15th and I Sts.; 1 story and mezzanine; 25x140 ft.; cost \$100,000; architect receiving bids. (Previously noted.)

D. C., Washington.—Carpenters' District Union, H. S. Hollahan, Prest., is having plans prepared for office building. (See Association and Fraternal.)

Ga., Decatur.—Bank of Decatur is having plans prepared by Edwards & Sayward, Atlanta, for building; 60x90 ft.; brick; roofing and flooring not decided; cost about \$50,000. Address Owner. (Lately noted.)

Ga., Louisville.—Bank of Louisville has plans by A. Ten Eyck Brown, Forsyth Bldg., Atlanta, for building.

Ky., Bowling Green.—Citizens' National Bank, Robt. Rodes, Prest., is having plans prepared by St. Louis Bank Equipment & Fixture Co., St. Louis, to enlarge building; 48x100 ft.; steel, concrete and stone; fireproof roof; concrete floors; steam heat; wiring and fixtures for lighting; plans ready May 3. Address Mr. Rodes. (Lately noted.)

Ky., Monticello.—Monticello Banking Co. plans to erect building on Upper Main St.; 25x75 ft.; pressed brick and stone; metal roof; cost \$16,000; lets contract about June 1; architect not selected and other details not determined. (Lately noted.)

La., Napoleonville.—Bank of Napoleonville will erect bank building; Louis Corde, Director.

Md., Snow Hill.—Deposit & Savings Bank, O. M. Purnell, Prest., will erect addition to building.

Miss., Charleston.—Bank of Charleston opens bids June 1 in office of Hanker & Cairns, Archts., Memphis, Tenn., to erect building; terra-cotta; gravel roof; concrete floors; cost about \$100,000. (Lately noted.)

Mo., Kansas City.—Unity School of Christianity, Chas. Fillmore, Prest., has plans by E. M. Boillott, Scarritt Bldg., for proposed office building; 4 stories and basement; 42x90 ft.; brick; stone trim; composition roof; construction by day labor under supervision of architects; L. G. Wilson, Structural Engr., Finance Bldg.

N. C., Charlotte.—Merchants & Farmers' National Bank, W. C. Wilkinson, 1st V.-P., leased Burwell & Dunn building and will remodel for bank building; 3 stories; install front, marble counters, banking fixtures, finish interior, etc.

S. C., Greenwood.—Dr. G. W. Gardner will improve Commercial Bank building; enlarge structure, install additional vault, directors' room, officers' room, etc.; contemplates erecting additional stories in future.

S. C., Greenwood.—People's Bank, B. F. McKeller, Prest., has plans by Thos. W. Corthen, Greenwood, for 3 additional stories to building on Public Square at West and Oak Sts.; fireproof; reinforced concrete; tile (Barrett) roof; tile floors in toilets, corridors and lobby; wood-wearing surfaces in offices; low-pressure steam heat; city lighting; will purchase and install 2 passenger elevators; date opening bids not determined. Address Architect or Mr. McKeller. (Lately noted to cost \$60,000.)

Tenn., Jellico.—United Mine Workers of America is having plans prepared by A. B. Baumann, Knoxville, for office building. (See Association and Fraternal.)

Tenn., Nashville.—National Life & Accident Insurance Co., 7th Ave. and Union St., purchased site and will erect office building.

Tex., Bay City.—First State Bank, F. S.

BUILDING NEWS

EXPLANATORY.

Only buildings costing \$10,000 or more, excepting a few public and semi-public structures.

BUILDINGS PROPOSED

Apartment-Houses.

Fla., Miami.—William Lunham will erect apartment-house; 3 stories; frame and stucco; cost \$15,000.

Fla., St. Augustine.—J. L. Boyes will remodel Keystone Hotel for apartment-house; 15 or 16 suites of 2 to 4 rooms with private bath and kitchenette.

Ga., Atlanta.—Philip Cohen will erect 2-story brick-veneer apartment-house; cost \$12,500.

Ga., Columbus.—Columbus Roberts is having plans prepared by T. F. Lockwood, Murrah Bldg., Columbus, for apartment-house; 43x106 ft.; 3 stories and basement; 6 apartments; steam heat; probably composition shingle roof; construction by day labor.

Md., Baltimore.—Clyde N. Friz, Munsey Bldg., is preparing plans for apartment-house at 40th St. and Stoney Run Lane; 3 stories; brick; about 24 suites.

Md., Baltimore.—Charles H. Consolvo, Prop. of Hotel Belvedere, Charles and Chase Sts., purchased property at 1019 N. Charles St., which, with 2 other structures at 1021 and 1023 N. Charles St., he will convert into apartment-house.

Md., Hagerstown.—J. Morris Guilder purchased 5 lots on Hamilton Blvd.; reported to erect apartment-house.

Mo., Sedalia.—Ed. Hurley, 241 Ilgenfritz Bldg., plans to erect apartment-house; 15 apartments; 3 stories and basement; 30x100 ft.; cost \$15,000; construction by owner; masonry, carpentry and roofing contracts let.

Mo., St. Louis.—Morris L. Friedman, 4212 W. Pine Blvd., is having plans prepared by T. P. Barnett Co., Central National Bank Bldg., St. Louis, for alterations to apartment-house; 3 stories; cost \$15,000.

Mo., St. Louis.—V. A. Chinberg will erect 2-story tenement; cost about \$10,000.

Oka., Oklahoma City.—Charles W. Gunter will erect apartment-house; cost \$10,000.

Oka., Tulsa.—J. W. Shields, 511 S. Denver St., is having plans prepared by Michael Mullens, care of Mr. Shields, for 2 apartment buildings at 8th and Lewis Sts.; 2 stories and basement; 24x46 ft.; frame; shingle roof; total cost \$12,000.

Va., Portsmouth.—Marcus Cohen will erect apartment-house; steam heat.

Association and Fraternal.

Ark., Jonesboro.—State Agricultural School, V. C. Kays, Prest., receives bids until May 16 for labor and material to erect engineering building and Y. M. C. A. building. (See Schools.)

D. C., Washington.—Carpenters' District Union, H. S. Hollahan, Prest., 42 G St., is having plans prepared by Waddy B. Wood, 816 Connecticut Ave., Washington, for office building on 6th St. N. W.; fireproof; brick and stone; cost \$150,000.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Tex., Fort Worth.—Mrs. J. Z. Wheat, San Robbins, Prest., will erect building; brick; 25x40 ft.; cost \$35,000.

Antonio, will remodel space in Wheat Building Guaranty State Bank; install marble fixtures, vault, tile floor, etc.; Mailander Company, Archt., Waco, Tex.

Tex., Ranger.—M. Plosky, Cisco, Tex., and Joe Goldenstein, Ranger, will erect store and office building. (See Stores.)

W. Va., Wheeling.—J. D. Merriman & Co., 1229 Main St., leased building at 1300 Main St. and will remodel.

Tex., Sweetwater.—Texas Bank & Trust Co. plans to erect 5-story building; 50x140 ft.; architect not selected and details not determined. (Lately noted.)

Tex., Velasco.—Ancient Free and Accepted Masons will erect lodge building; lower floor for bank and store. (See Association and Fraternal.)

Va., Newport News.—Newport News Bank & Trust Co. is having plans prepared by Rossel Edward Mitchell & Co., Ltd., Paul-Gale-Greenwood Bldg., Norfolk, to remodel building on Washington Ave.; cost \$10,000.

Va., Norfolk.—James E. Woodhouse and associates plan to erect store and office building. (See Stores.)

Va., Roanoke.—National Exchange Bank plans to erect building at Campbell and Jefferson Sts.; probably brick, stone and concrete; cost \$100,000.

W. Va., Stanaford.—Elkhorn Piney Coal Mining Co., C. M. Binford, Supt., will erect office building.

Churches.

Ark., Fort Smith.—First Methodist Church purchased site at N. 15th and B Sts. and is reported to erect \$150,000 building. Address The Pastor.

Fla., Vero.—St. Helen's Catholic Church, Father Gabriel, Pastor, Fort Pierce, Fla., plans to erect building; 30x75 ft.; solid block foundation; frame with stucco; galvanized metal shingle roof; city lighting; cost \$5000. (Lately noted.)

Ga., Commerce.—First Methodist Church will erect building. Address The Pastor.

Ga., Columbus.—Rose Hill Baptist Church, Rev. L. A. Henderson, Pastor, is having tentative plans prepared for Sunday-school building.

Ga., Rome.—Fifth Avenue Baptist Church will improve church and erect addition to Sunday-school; cost \$12,000; L. A. Dean, Supt. of Sunday-school.

La., St. Martinsville.—Catholic Church, Father Peters, Pastor, will remodel and erect addition to building; cost \$20,000.

Miss., Vicksburg.—Heroden Baptist Church, Rev. E. Hawthorne, Pastor, is having plans prepared by W. A. Rayfield & Co., Birmingham, Ala., for building at 1000-03 North St.

Mo., Paris.—Presbyterian Church has plans by Ben C. Elliott, Mexico, Mo., for building on Caldwell St.; brick and stone; composition roof; reinforced concrete floor in auditorium; steam heat; electric lighting; cost \$25,000. (Lately noted.)

Mo., St. Joseph.—First Presbyterian Church is considering erecting Sunday-school addition; Graham G. Lucy, Chrmn. of Committee, to plan preliminary details.

N. C., Roanoke Rapids.—Rosemary Methodist Church, Rev. Chas. M. Lance, Pastor, has plans by R. L. Tippett, Roanoke Rapids, for parsonage; frame; pine floors; 8 rooms; electric lighting.

Okla., Oklahoma City.—Trinity Baptist Church, J. H. L. Hawkins, Pastor, will resume work on \$50,000 structure; basement completed. (Previously noted.)

Okl., Okmulgee.—First Presbyterian Church will erect building; cost about \$65,000. Address The Pastor.

Okl., Oklahoma City.—St. John's Baptist Church, Rev. W. D. Hill, Pastor, opens bids June 15 to erect building at 15 N. Peach St.; 60x80 ft.; ordinary construction; metal shingle roof; pine inclined floor; steam heat; electric lighting; cost \$20,000; W. A. Rayfield & Co., Archts., Birmingham, Ala., may be addressed.

Okl., Tulsa.—Trinity Episcopal Church, Rev. C. V. Kling, Rector, will erect building at 13th and Boulder Ave.; cost \$150,000. (Lately noted.)

Tenn., Dyersburg.—Baptist Church will erect building; cost \$60,000. Address The Pastor.

Tex., Dallas.—Tefereth Israel Congregation, W. M. Levy, Secy., will erect synagogue; cost \$65,000 to \$75,000.

Tex., El Paso.—Central Baptist Church, Rev. George W. McCall, Pastor, has plans by O. H. Thorman, 725 First National Bank Bldg., El Paso, for building at Virginia and Montana Sts.; 1 story; brick and steel; cost about \$100,000. (Lately noted.)

Tex., Fort Worth.—Hemphill Heights M. E. Church South is having plans prepared by W. C. Meador, Wheat Bldg., Fort Worth, for building at Shaw and Lipscomb Sts.; 2 stories and basement; brick and hollow tile; asbestos shingle roof; cost complete \$45,000. (Lately noted.)

Tex., Fort Worth.—First Baptist Church has plans by W. C. Meador, Wheat Bldg., Fort Worth, addition to auditorium at 4th and Taylor Sts.; 50x80 ft.; 2 stories and basement; stone and brick; cost complete \$60,000; construction by day labor. (Previously noted.)

Tex., San Antonio.—Trinity Methodist Church, Rev. H. C. Leonard, Pastor, will erect building; cost about \$50,000.

Va., Berkley (P. O., Norfolk).—Mikro Kades Congregation, A. J. Legum, Treas. Building Committee, is having plans prepared by Rossel Edward Mitchell & Co., Ltd., Paul-Gale-Greenwood Bldg., Norfolk, for synagogue; brick, stone and wood joist construction; 45x55 ft.; slate roof; oak floors; warm-air heat; cost \$35,000; bids to be asked soon.

Va., Boyce.—Protestant Episcopal Church, Rev. B. D. Chambers, Rector, is having plans prepared by C. Morgan Marshall, 121 Mercer St., Baltimore, to rebuild parish-house; stone; slate roof; other details indefinite. (Lately noted damaged by fire.)

Va., Cherrydale.—Catholic Congregations is having plans prepared by Milburn, Heister & Co., Union Savings Bank Bldg., Washington, for building; hollow tile; cost \$10,000; plans ready for contractors May 10. Address Father Lackey, Clarendon, Va. (Lately noted.)

W. Va., Bluefield.—Congregation, Rev. E. A. Shugart, D. D., Pastor, plans to erect building; cost about \$25,000.

W. Va., Davy.—Methodist Episcopal Church South, Rev. C. L. Vaughan, Pastor, plans to erect building lately noted; about 60x35 ft.; brick veneer; cost about \$10,000; other details not determined. (See Machinery Wanted—Building Material.)

W. Va., Kimball.—Congregation, Rev. R. E. Greer, Pastor, plans to erect building.

City and County.

Fla., St. Petersburg—Hospital, etc.—City Commrs. are considering calling election on \$90,000 bonds for improvements to include \$50,000 addition to City Hospital, \$25,000 to build concrete bridge across Booker Creek, \$10,000 to construct concrete bankstand and comfort station in Williams Park, and \$5000 to erect comfort station at City Hall; plans for latter prepared by W. S. Shull, St. Petersburg.

La., New Orleans—Sheds, etc.—Dock Board Comms. will erect storage sheds, etc., in connection with ship-coaling dock; divided into 5 compartments; capacity 25,000 tons coal; bin 85x580 ft.; J. D. O'Reilly, Chief Engr. Dock Board.

Mis., Meridian—Auditorium.—Meridian Convention Bureau organized with James Bozman, Secy., to arrange plans for financing purchase of site and erection of auditorium with seating capacity of about 5000.

Mo., St. Joseph—City Hall.—City votes May 27 on \$450,000 bonds to erect city hall and \$100,000 bonds to erect hospital for contagious diseases. Address The Mayor.

Mo., Kansas City—Office, Vault and Garage. City has plans by Albert Turney, 417 Mercer Ave., Kansas City, for building to contain office, vault and garage at 49th and Mill Sts.; 1 story; 35x50 ft.; brick and reinforced concrete; stone trim; bids received by J. Ray Samuels, Purchasing Agent, until May 7 for material and erection of building. (Previously noted.)

N. C., Burlington—Community Building.—City has gift of \$100,000 to erect community building; plans include gymnasium and swimming pool, clubrooms and gamerooms for boys and girls, bowling alleys, classrooms, library-rooms, motion-picture equipment, auditorium, restrooms, lockers, dressing-rooms, etc.; J. L. Scott, Chrmn. of Executive Committee.

Okla., Idabel—Jail and Courthouse.—McCur- tain County is having plans prepared for courthouse and jail. (See Courthouses.)

Tex., George West—Jail and Courthouse.—Live Oak County Commrs. are having plans prepared for courthouse and jail. (See Court-houses.)

Courthouses.

Ala., Bessemer.—Jefferson County Board of Revenue is having plans revised by H. B. Wheelock, Steiner Bldg., Birmingham, for completion of courthouse; will call for bids May 10. (Previously noted.)

Okla., Idabel.—McCur- tain County is having plans prepared by Jewell Hicks, Oklahoma City, for courthouse and jail for which \$125,000 bonds were voted; H. A. Smith, County Clerk, (Lately noted.)

Tex., George West.—Live Oak County Commrs. are having plans prepared by Alfred Giles Co., San Antonio, for courthouse and jail; 100x140 ft.; 3 stories; jail in 3d story; cost about \$140,000; plans ready for bids about June 1. (Lately noted.)

Dwellings.

Ark., Little Rock.—Ike Kemper is having plans prepared by Mann & Stern, Little Rock, for residence at 21st and Aul Sts.; 35x60 ft.; 2 stories; brick veneer; tile roof; frame floors; hot-water heat; cost \$20,000; bids opened in about 3 weeks. Address Architects. (Lately noted.)

Ark., Little Rock.—Thalman & Reed will erect residence at 1272 Center St.; 2 stories; brick veneer; cost \$22,500.

D. C., Washington.—D. W. O'Donohue, Union Trust Bldg., is having plans prepared by A. P. Clarke, Jr., 816 14th St. N. W., Washington, for residence on Rockville Pike; brick and frame.

D. C., Washington.—Middaugh & Shannon will erect 3 frame dwellings, 1127 Sigbee Place, 4102 12 St. and 1126 Shepherd St.; also 3 frame dwellings, 4107-11 12th St. N. E.; cost \$36,000.

D. C., Washington.—F. T. Klimkiewicz & Co., 1304 F St. N. W., are having plans prepared by L. W. Williams, 1389 F St. N. E., for 5

dwellings at 1124-32 Buchanan St. N. W.; 2 stories; 20x38 ft.; brick; cost \$22,000.

D. C., Washington.—J. L. Saigmuller is having plans prepared by O. G. Voight, Home Life Bldg., Washington, for dwelling on Reserve Hill Farm, Va.; 2 stories and basement; 39x52 ft.; cost \$15,000.

D. C., Washington.—Charles E. Wire, Inc., 1413 H St. N. W., will erect 100 residences on 3d and Rittenhouse Sts. N. W.; also 20 stores and residences on 14th and Decatur Sts.; brick and stone; 2 stories; total cost about \$700,000; plans and construction by owner.

D. C., Washington.—W. H. Johnston is having plans prepared by Milburn, Heister & Co., Union Savings Bank Bldg., Washington, for residence; cost \$12,000; contract let this month.

Fla., Palm Beach.—Palm Beach Development Co. will erect 10 dwellings.

Fla., St. Augustine.—J. A. Lew will erect 2 additional dwellings on Saragossa St.

Fla., St. Petersburg.—T. C. Campbell will erect rooming-house; 80 rooms with private bath; 4 stories; brick; electric elevators.

Fla., Miami.—John Seybold will erect 5 dwellings in Spring Garden addition; cost \$6000 each; plans to erect 5 more on completion of above.

Fla., St. Petersburg.—Nat B. Brophy, Prest. Florida Bank of St. Petersburg, will erect residence; brick.

Ga., Americus.—L. A. Morgan is having plans prepared by T. F. Lockwood, Murrah Bldg., Columbus, Ga., for residence; 2 stories; brick veneer; slate or tile roof; hardwood floors; tiled baths; construction probably by day labor; cost \$10,000.

Ga., Atlanta.—Paul Wesley will erect two 1-story brick-veneer bungalows; cost \$10,500.

Ga., Augusta.—Geo. R. Lombard, 623 Green St., has plans by Willis Irvin, Lamar Bldg., Augusta, for residence at Gardner St. and Hickman Road; 6 rooms and basement; hollow tile and brick veneer; tile roof; pine and oak floors; cost \$24,000; construction by day labor; most of material purchased. Address Owner. (Previously noted.)

Ky., Ashland.—T. L. Yon & Co., Huntington, W. Va., will erect 3 bungalows; stone construction.

Ky., Henderson.—J. L. Smith is having plans prepared by H. E. Royle & Co., 406 Furniture Exchange Bldg., Evansville, Ind., for residence, store building and garage; 2 stories; 20x60 ft.; 1 story; 20x65 ft.; brick veneer and frame; cost \$10,000.

Ky., Lexington.—Mrs. Charles Vaught will erect residence; 2 stories; brick.

Ky., Louisville.—Chas. J. Meriwether, 202 Courier-Journal Bldg., will erect 7 dwellings on 40th St. between Broadway and Chestnut; 25x41 ft.; 5 rooms and bath; concrete and frame; asphalt shingle roofs; wood floors; electric lighting; cost \$2800 each; Monarch hot-air heat, \$152; plans and construction by owner. (Lately noted.)

La., New Orleans.—Olive Land & Improvement Co. will develop Nautical Terrace subdivision; erect number of bungalows; cost \$50,000.

Md., Baltimore.—Frank Novak Realty Co., Harford Road and B. & O. R. R., will erect 14 dwellings, 2003-29 N. Wolfe St.; 2 stories; 20x36 ft.; cost about \$40,000; Otto G. Simonson, Archt., Maryland Casualty Tower, Baltimore; construction by owner.

Md., Baltimore.—John J. Carlin, 11 E. Lexington St., will erect twelve 2-story dwellings in 2900 block Norfolk Ave.; cost \$18,000; Stanislaus Russell, Archt., 2730 N. Calvert St., Baltimore; construction by owner.

Md., Baltimore.—James B. Yeatman has

plans by Stanislaus Russell, 11 E. Lexington St., Baltimore, for 2 dwellings on Montpelier St.; 2 stories; 14x45 ft. and 18x30 ft.; brick; cost \$4,000; construction by owner who is taking bids on separate contracts.

Md., Baltimore.—Chas. W. Bald, 2608 Keyworth Ave., has plans by J. Raymond Gerwig, 1811 Ashburton St., Baltimore, for residence on Park Heights Ave.; 2½ stories; 60x58 ft.; brick; cost \$20,000.

Md., Baltimore.—Willoughby Beach Corp., Wm. H. Gisin, Mgr., 213 Courtland St., will erect 10 bungalows; 1½ stories; 30x40 ft.; frame; total cost \$15,000.

Md., Baltimore.—Francis E. Baldwin, Professional Bldg., is preparing plans for addition to Cardinal Gibbons' residence at Charles and Mulberry Sts.; 3 stories; brick.

Md., Baltimore.—Horace W. Thomas has plans by F. E. Beall, 1335 Gilmor St., Baltimore, for five 2-story dwellings on south side Clifton Ave., west of Smallwood St.; slab roofs; cost \$10,000; construction by owner.

Md., Govanstown.—Hicks, Tase & Norris, 106 W. Madison St., Baltimore, will erect 8 dwellings; 2 stories; 20x30 ft.; brick; cost \$24,000; taking bids on separate contracts.

Md., Point Pleasant.—Point Pleasant Park Co., Inc., 435 Equitable Bldg., Baltimore, Incptd., with E. B. Edwards, Prest.; A. Graham Boggs, Jr., Treas.; E. B. Clark, Secy.; H. L. Clapham, Supt. of Construction; purchased about 1200 acres of land at junction of Curtis, Marley and Furnace Creeks and plans to develop home community for working men; erect 300 dwellings by summer and 500 additional by spring of 1920; 18x30 ft., 20x30 ft. and 22x30 ft.; frame; composition roof; pipeless furnaces; A. D. Calendar, Archt., 435 Equitable Bldg.; ready for bids; drawings at 440 Equitable Bldg.; will drive artesian wells, construct drainage system, etc.; grading and building streets under supervision of Foote & Saunders, Construction Contrs., 435 Equitable Bldg.

Md., Towson.—Charles H. Whitaker will erect residence.

Mo., Hewesville.—Stone McClure is having plans prepared by August Helfert, 11th and Barrett Sts., Sedalia, Mo., for residence and garage near Hewesville; 2 stories and basement; 41x55 ft.; brick veneer; cost \$16,000.

Mo., Kansas City.—C. S. Burns of Burns & McDonald will erect residence in Mission Hills.

Mo., Kansas City.—J. R. Miner, 3925 Belleview Ave., will erect 4 dwellings; 2 stories and basement; 30x25 ft.; total cost \$20,000; plans and construction by owner.

Mo., Kansas City.—J. C. Nichols, 922 Commerce Bldg., has plans by Wight & Wight, First National Bank Bldg., Kansas City, for residence at 1425 W. 58th St.; 2 stories and basement; 62x36 ft.; brick; stone trim; composition roof; cost \$18,000; having plans prepared by H. S. Bill, Columbia, Mo., for residence at 806 W. 59th St.; 2 stories and basement; 42x37 ft.; brick; stone trim; shingle roof; cost \$12,000; construction by owner.

Md., Newlandtown.—Lieut.-Col. Fahy is having plans prepared by Glen Brown, 806 Seventeenth St., Washington, D. C., for residence; 2 stories; 50x160 ft.; brick.

Mo., St. Louis.—J. W. Jones will erect four 2-story dwellings; cost \$20,000.

Mo., St. Louis.—Howard Sidener will erect 8-room residence in Hi-Pointe.

Mo., St. Louis.—H. A. Barnett, 3622 De Tony St., will erect two 2-story dwellings at 441-15 Shaw St.; cost \$10,000.

N. C., Asheville.—Ralph Rosenberg, V.-P. Carolina Woods Products Co., will erect residence; 10 rooms; concrete with outside walls of weatherboard; cost \$10,000.

N. C., Charlotte.—J. W. Zimmerman plans to erect residence on Dilworth Road; brick; slate roof; architect not engaged and details not determined. (Lately noted to cost \$25,000.)

N. C., Charlotte.—J. B. Duke, 5th Ave. and 77th St., New York, is having plans prepared by C. C. Hook, Charlotte, for residence in Myers Park; 3 stories; frame and stone; interior woodwork of white with mahogany doors; marble floor in main hall with wainscot and panel work; each bedroom provided with private bath; third floor for servants' quarters; living-room 30x50 ft., opening into solarium 25x40 ft.; refrigerating plant; vapor heat; vacuum cleaning system; incinerator; garden 100x70 ft.; avenue of 300 ft. from garden, terminating at fountain.

N. C., Greensboro.—J. C. Penny will erect addition to and remodel residence; cost \$15,000.

N. C., Roanoke Rapids.—W. B. Weeks has plans by R. L. Tippett, Roanoke Rapids, for brick bungalow; shingle roof; hardwood floors electric lighting; steam heat; cost without equipment, \$7000.

N. C., Roanoke Rapids.—J. T. Stainback has plans by R. L. Tippett, Roanoke Rapids, for 8-room dwelling; frame; shingle roof; hardwood floors; electric lighting; hot-air heat; bath and laundry; cost without equipment \$8000.

N. C., Charlotte.—John Q. Tate is having plans prepared by W. H. Peeps, Charlotte, for residence in Myers Park; 9 rooms; Colonial style; hot-air heat; 2 baths, finished in tile; hardwood floors; shingle roof.

Okl., Oklahoma City.—Aurelius-Swanson Co. will erect 40 dwellings in Winana Addition; cost \$750 to \$20,000 each.

Okl., Tulsa.—Pauline Turk, 15th and Cincinnati Sts., will erect duplex residence at 310 E. 15th St.; 30x38 ft.; 2 stories; frame; shingle roof; cost \$10,000; construction begun. (Lately noted.)

Okl., Tulsa.—L. B. Roberts will erect store-room; cost \$18,000.

Okl., Tulsa.—Homer A. Orcutt will erect 2 residences on S. Quaker St. and residence on S. Peoria St.; cost \$27,000.

S. C., Anderson.—Southern Realty Co. purchased 200-acre site and plans to develop; erect number dwellings.

S. C., Greenville.—Camperdown Mill will erect boarding-house for employees; 2 stories; frame; also repair dwellings.

S. C., Greenwood.—R. V. Pollard is having plans prepared by Raymond B. Spencer, Memphis, Tenn., for residence; frame; asphalt shingle roof; hot-air heat; cost about \$20,000.

Tenn., Knoxville.—J. E. Fairchild will erect residence in Island Home Park; 2 stories; 8 rooms.

Tenn., Knoxville.—J. D. McIntyre will erect \$10,000 dwelling on Kingston Pike.

Tenn., Knoxville.—E. W. Ogden will erect residence on Kingston Pike; cost \$25,000.

Tex., Houston.—Houston Land Corp. will erect 10 dwellings; total cost \$32,250.

Tex., Mexia.—L. S. Munger will erect residence; cost \$20,000.

Tex., Mexia.—John H. Sweatt will erect dwelling.

Va., Petersburg.—Independent Trunk & Bag Co., Henry Plummer, Prest., will erect number cottages for employees.

Va., Richmond.—Walter C. Schaaf will erect 5 brick dwellings on West Allen Ave. and Cary St.; cost \$19,000.

Va., Alexandria.—Alexandria Construction Co., Inc., Wm. H. Tyler, Prest., plans to erect about 50 dwellings within next four months; brick, cement and frame; cost \$3000 to \$10,000.

each; plans and construction by owner; John M. Rosevear, Engr. of company.

Va., Alexandria.—Chamber of Commerce, E. Stuart Royer, Business Mgr., is promoting erection of 25 dwellings; brick; 2 stories; cost \$100,000.

Va., Danville.—Geo. A. Myers is having plans prepared by E. R. James, Dudley Bldg., Danville, for residence on Main St.; 2 stories; brick, frame and stucco; cost \$15,000.

Va., Kilmarnock.—S. C. Euhanks plans to erect residence; hardwood floors, etc.

Va., Lynchburg.—Dr. S. R. Shumate has plans by A. S. Johnson, People's Bank Bldg., Lynchburg, for residence at Rivermont; 2 stories and basement; 78x40 ft.; frame.

Va., Norfolk.—W. W. Seeley, 1257 W. 27th St., plans to erect 1 dwelling each on 35th, 36th and 37th Sts.; 2 stories; frame; total cost \$13,000.

Va., Roanoke.—N. W. Phelps has plans by Frye & Pollitt, McBain Bldg., Roanoke, for residence on Commerce St., near Maple Ave.; 2 stories; 32x40 ft.; cost \$10,000.

W. Va., Sutton.—Lawrence Freeman, Mgr. of Sutton Hardware Co., will erect residence.

Government and State.

Tex., Gilmer—Postoffice.—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C., opened bids to erect post-office building; Henry & Hatfield Construction Co., Indianapolis, Ind., is lowest bidder at \$48,572. (Lately noted.)

Va., Richmond—Storage.—Construction Division, War Department, Washington, D. C., will erect balloon-storage building at aviation and general supply depot at Fulton; 88x200x70 ft.; cost \$40,000 to \$50,000; Capt. Charles W. Stolze, officer in charge at depot.

Va., Yorktown—Naval-mine Depot.—Bureau of Yards and Docks, C. W. Parks, Chief, Washington, D. C., opened bids to construct 10 buildings at naval-mine depot; Hugh S. Roberts & Co., 1123 Broadway, New York, are lowest bidders at \$138,141. (Lately noted in detail.)

Hospitals, Sanitariums, Etc.

Fla., St. Petersburg.—City Comrns. are considering calling election on \$90,000 bonds for improvements to include \$50,000 addition to City Hospital, etc. (See City and County.)

Ga., Atlanta.—Steers Sanitarium organized with \$10,000 capital by Dr. James G. Steer and others; will erect \$15,000 hospital.

Ga., Fitzgerald.—Company is being organized by Drs. E. J. Dorminey, D. B. Ware, A. H. Denmark and others to erect hospital; brick; cost \$35,000, including equipment.

Ga., Milledgeville.—Board of Trustees is having plans prepared by A. Ten Eyck Brown, Atlanta, for nurses' home at State Sanatorium; 191x124 ft.; 3 stories and basement; court in center; ordinary construction; tile roof; post and girder floor construction, partially concrete; wood surface; cost \$150,000; opens bids about June 15. Address Chrman. Board of Trustees, Milledgeville. (Previously noted.)

Mo., Marshall.—Fitzgerald Memorial Hospital, care W. C. Gordon, is having plans prepared by Shepard, Farrar & Wiser, 1202 R. A. Long Bldg., Kansas City, for hospital; cost \$60,000.

Mo., St. Joseph.—City votes May 27 on \$100,000 bonds to erect hospital for contagious diseases; Dr. H. de Lamater, Health Officer, City Hall. (See City and County.)

N. C., Sanatorium.—North Carolina State Sanatorium, Dr. L. B. McBrayer, Supt., has plans by Chas. C. Hook, Charlotte, for enlargement of tuberculosis sanatorium; main

building 40x138 ft.; 3 stories and part basement; wing 67x121 ft.; fireproof; concrete and brick; slate roof; electric passenger elevator; install large size sterilizer; main building for officers, operating-rooms, examining-rooms, etc.; wing to be used for wards and rooms; 15 baths, each finished in tile; heat from central heating plant already installed; cost about \$125,000; plans ready for bids by May 15.

Tenn., Jellico.—United Mine Workers of America is having plans prepared by A. B. Baumann, Knoxville, for miners' hospital. (See Association and Fraternal.)

Tex., Wichita Falls.—Northwest Texas Insane Asylum is having plans prepared by C. H. Page & Bro., Austin, for \$300,000 addition.

Va., Charlottesville.—State Board of Health, E. G. Williams, Commr., Richmond, opens bids May 19 to erect 3 patients' buildings and kitchen addition to present structure; former, frame; composition roofs; wood floors; interior, semi-fireproof; the roof; concrete floors; central heating plant; total cost \$75,000; Chas. M. Robinson, Archt., Richmond; H. M. Miller, Supervising Archt., Roanoke. Address State Board of Health. (Previously noted.)

W. Va., Terra Alta.—State Board of Control, J. S. Lakin in charge of construction, Charleston, is having plans prepared by H. Rus Warne, Charleston, for central kitchen and dining-room at State Tuberculosis Sanatorium; 140x36 ft., with wing 49x46 ft.; frame construction; shingle roof; oak floors; probably Delco lighting; cost \$25,000 to \$30,000. Address Mr. Lakin or Dr. E. E. Clovia, Supt. Sanatorium.

Hotels.

Fla., Pass-a-Grille.—George Lizaite is reported to erect hotel to replace burned structure.

Fla., St. Petersburg.—L. H. Miller is reported to erect hotel.

Ga., Atlanta.—G. W. Gillespie is having plans prepared by W. A. Rayfield & Co., Birmingham, Ala., for hotel at Auburn Ave. and Roseberry St.; 53x100 ft.; semi-fireproof; tar and gravel roof; pine floors; steam heat; electric lighting; cost \$25,000; bids opened in June.

Mo., Chaffee.—Union Building Co., W. C. Morris, Secy., is having plans prepared by Lindsay Architectural Co., Sikeston, Mo., for hotel, lodge and store building; 86x120 ft.; 4 stories; fireproof; concrete and composition roof; concrete floors; electric lighting; cost \$125,000; date opening bids not set. (Lately noted.)

N. C., Durham.—Malbourne Hotel, E. I. Rugg, Mgr., plans to erect 2 or more stories to hotel.

N. C., Whiteville.—Whiteville Hotel Co., incptd. with \$90,000 capital by H. L. Lyon, A. E. Powell, G. R. McNeil and others; will erect hotel on site of old Formyduval Hotel, lately noted damaged by fire; cost \$30,000.

Okl., Bartlesville.—Bartlesville Hotel Co. opens bids May 15 to erect addition to hotel; 40x90 ft.; 4 stories; reinforced concrete; composition roof; concrete floors; freight elevator; cost \$40,000 to \$50,000; heating, \$6000 to \$8000; Walton Everman, Archt., Bartlesville.

Okl., Shawnee.—Wade Willard & Bro. will probably let contract on percentage basis to George P. Carr, Shawnee, to erect hotel on Union Ave.; 80 guestrooms; 100x85 ft.; 6 stories; brick and concrete; composition roof; oak and tile floors; steam heat; cost \$150,000; A. C. Davis, Archt., Shawnee, may be addressed.

Tex., Beaumont.—W. J. Crawford, J. Cooke Wilson and others are promoting erection of hotel.

Va., Lawrenceville.—Brunswick Hotel Corp., incptd. with \$50,000 capital by W. S. Peebles,

Prest.; L. H. Raney, V.-P.; H. W. Upchurch, Secy.-Treas.; will erect Hotel Brunswick; brick; 4 stories; 60x150 ft.; steam heat; electric lights; cost \$35,000. (Lately noted.)

Va., Norfolk.—Philip B. Moser, Law Bldg., is reported preparing plans for 5-story hotel.

Va., Roanoke.—J. A. Newcomb, Hotel Bristol, Bristol, Va., purchased Ponce de Leon Hotel and will remodel.

Va., Roanoke.—T. E. Sebrell and J. T. Horne are promoting erection of hotel at Jefferson St. and Bullitt Ave.; site 153x200 ft.; 200 to 250 rooms, each with private bath; cost about \$1,000,000; plans being prepared.

Miscellaneous.

Ga., Atlanta—Clubhouse.—Atlanta Nurses' Club, Miss F. A. Mobley, Chrmn., Bldg. Committee, 25 Porter Place, has plans by C. A. Frazer, Candler Bldg., Atlanta, for proposed clubhouse, to include living quarters, recreation-rooms, cafeteria, etc.; cost \$100,000.

Miss., Hattiesburg—Club Building.—Country Club will erect building on Bonhomie Road, near Hattiesburg.

Railway Stations, Sheds, Etc.

Ga., Atlanta.—Southern Railway Co., Curtis Dougherty, Chief Engr., M. W. & S., Lines West, Cincinnati, will rebuild transfer sheds at Inman Yards lately noted damaged by fire; 16x760 ft. and 30x760 ft., respectively; 1 story; construction by company's forces. (Lately noted.)

Schools.

Ala., Birmingham.—Dr. W. H. Mixon is having plans prepared by W. A. Rayfield & Co., Birmingham, for building at Walker St. and 11th Ave. for Roosevelt Memorial School for Girls; 72x140 ft.; semi-fireproof; tar and gravel roof; pine floors; steam heat; electric lighting; cost \$50,000; date opening bids not determined. Address Archts.

Ark., Earle.—Earle Special School Dist. will erect \$100,000 high school. Address District School Trustees.

Ala., Ramer.—Montgomery County Board of Education, Montgomery, receives bids until May 7 to erect brick school building; W. F. Fuglin, County Supt. of Schools; Frederick Ausfeld, Archt., Bell Bldg., Montgomery, Ala. (Lately noted.)

Ark., Jonesboro.—State Agricultural School, V. C. Kays, Prest., receives bids until May 16 for material and labor to erect brick engineering building and brick Y. M. C. A. building, according to plans of Frank M. Blasdell, Little Rock; material to be purchased by owner, who will construct foundations; labor only to be contracted for.

Fla., Gainesville.—Gainesville Special School Tax Dist. No. 26 votes May 20 on \$150,000 bonds to erect, enlarge and improve buildings for white and colored schools; E. K. Simmons, Secy., Alachua County Board of Public Instruction, Gainesville.

Fla., Green Cove Springs.—Clay County Board of Education plans to call election on \$50,000 bonds to erect school building.

Ga., Columbus.—City Board of Education is having plans prepared by T. F. Lockwood, Murrah Bldg., Columbus, for grammar school building; California type; stucco; 1 story; 8 rooms; tile roof; steam heat; cost \$22,000; lets contract in May; Roland B. Daniel, Supt. of Schools. (Lately noted.)

Ga., Fort Valley.—City voted \$39,000 bond issue to include \$15,000 for school annex and \$24,000 for paving; plans for school provide 8 to 10 rooms; brick and concrete; slate or other fireproof roof; pine floors; steam heat;

electric lights; Ralph Newton, Supt. of Public Schools. (Lately noted.)

Ky., Millersburg.—County Board of Education, Paris, Ky., called election for May 31 in Millersburg, McIlvain, Purdy, Tarr and Letton School districts on tax to erect consolidated school building or remodel structure. (Lately noted to erect \$35,000 building.)

La., Franklinton.—Washington Parish School Board, D. H. Stringfield, Supt., is having plans prepared by L. B. Renard, Franklinton, for addition to high-school building; brick; cost \$11,000; construction to begin June 1. (Lately noted.)

La., Norwood.—Parish School Board will call election on \$15,000 bonds to erect high school in Fourth Ward; equip with waterworks, electric lights, etc.; D. G. Lunsford, Supt. of Schools, Clinton, La.

La., Gonzales.—Parish School Board will erect school building; cost \$60,000.

Md., Annapolis.—Prof. Jos. R. Wilmer is having plans prepared for school to replace structure lately noted damaged by fire; 1 story; 40x40 ft.; brick.

Md., Baltimore.—Church of Blessed Sacrament, Rev. James O'Connell, Pastor, let contract to John J. Moylan, 538 N. Calvert St., Baltimore, to erect parish school at Spring Hill Terrace and Star Lane; 60x100 ft.; 2 stories and basement; construction of masonry, Port Deposit granite and Indiana limestone; slate roof; tile and concrete floors; cost \$50,000; steam heat; \$2500; electric lighting; \$1000; Hugh L. Kavanagh, Archt., 913 N. Calvert St., Baltimore. (Lately noted.)

Md., Baltimore.—Johns Hopkins University is having plans prepared by Joseph Evans Sperry, 400 Calvert Bldg., for addition to chemical laboratory; 1 story; ornamental brick; marble trim; contractors estimating are: Consolidated Engineering Co., 243-55 Calvert Bldg.; B. F. Bennett Building Co., 123 S. Howard St.; Frailey Bros. & Haigley, 18 Clay St., all of Baltimore.

Miss., Cleveland.—Board of Supervisors created Cleveland Consolidated School Dist.; district votes May 19 on bond issue to erect high-school building; accommodate more than 500; cost about \$100,000.

Miss., Hattiesburg.—Mississippi Woman's College, J. L. Johnson, Prest., receives bids until May 10 to construct 2 dormitories and mess hall; 40x176 ft.; 2 stories; reinforced concrete and brick; slate or tile roof; reinforced concrete floor construction overlaid with wood; plans and specifications on file after May 5 at office T. E. Ross, Chrmn. Board of Trustees, 203 Ross Bldg., Hattiesburg. (Previously noted.)

Miss., Jackson.—Millsaps College will erect 4 buildings of different sizes and connected for dormitory; brick; tile and composition roof; ordinary floor construction; steam heat; electric lighting; cost about \$95,000. Address W. M. Bule, Treas. (Lately noted to receive bids until May 17.)

Miss., Poplarville.—Pearl River Agricultural High School will erect building to replace structure damaged by fire at loss of \$20,000. Address Professor Huff.

Mo., Chilhowee.—Board of Education, J. H. Russell, Jr., Secy., will erect consolidated grade and high school; 2 stories and basement; 53x73 ft.; brick; stone trim; composition roof; steam heat; cost \$20,000; W. E. Schrage, Archt., 43 E. 32d St., Kansas City; bids received until May 10. (Lately noted.)

Mo., Columbia.—University of Missouri, J. G. Babb, Secy., let contract to Davis & Phillips, Columbia, to erect building for School of Journalism; 95x62 ft.; 2 stories and basement; fireproof; slate roof; tile block and reinforced concrete floors; vapor system,

of heat; James P. Jamleson, Archt., 800 Security Bldg., St. Louis. (Lately noted.)

Mo., Conception Junction.—Board of Education, School Dist. No. 125, Lee Stowell, Clerk, receives bids until May 15 to erect 2-story brick addition to school building; plans and specifications at office W. S. Vandeventer Lumber Co., Conception Junction, and office Collier-Adams Manufacturing Co., St. Joseph, Mo.

Mo., Eldorado Springs.—Board of Education is having plans prepared by H. R. Primmer, Buckner Bldg., Nevada, Mo., for high-school building; 2 stories and basement; 60x84 ft.; brick, stone, terra-cotta and reinforced concrete; composition roof; cost \$40,000; plans ready for bids.

Mo., Grant City.—Board of Education, Leo Phipps, Secy., is having plans prepared by J. H. Felt & Co., 800 Grand Ave., Temple, Kansas City, for grade school; cost \$36,000.

Mo., Springfield.—Board of Education will erect school building at Dale and Lindell Sts.; bids received until May 7.

Mo., Spickard.—Board of Education, C. O. Winters, Clerk, is having plans prepared by R. H. Sanneman, Reserve Bank Bldg., Kansas City, for addition to school building; 2 stories and basement; 24x54 ft.; stucco; stone trim; shingle roof; cost \$20,000.

Mo., St. Louis.—Belleville School Dist. votes May 17 on \$200,000 bonds to erect Junior High School at Illinois and Lincoln Sts.; Camille Nehaus, Secy. Board of Education.

N. C., Marion.—McDowell County Board of Education, N. F. Steppe, Secy., Marion, receives bids until May 12 to erect school building in Glenwood Township; plans and specifications at office T. E. Davis, Archt., Asheville, and office Mr. Steppe as above.

N. C., Raleigh.—St. Mary's School will expend \$10,000 for alterations to main building.

N. C., Swannanoa.—Swannanoa Special School Dist. votes June 24 on \$12,500 bond issue to erect school building. Address District School Trustees.

Okl., Amarillo.—Board of Education has plans by S. S. Voigt, Wichita Falls, Kan., for school building; 74x93 ft.; mill construction; composition roof; wood and concrete; steam heat; electric lights; estimated cost \$45,000. Address Architects. (Lately noted.)

Okl., Tulsa.—Kendall College Trustees, L. C. Walter, Secy., receive bids until May 14 (extended date) to erect gymnasium according to plans and specifications by C. K. Birdsall, Tulsa, and on file at 908 Exchange National Bank; separate bids for general contract, heating and plumbing and electrical wiring. (Lately noted.)

S. C., Charleston.—Public School Comms. receive bids at office A. B. Rhett, Supt. of City Public Schools, until June 2 to erect elementary school at King and Moultrie Sts.; separate bids for general contract, heating and plumbing; plans by Benson & Barbot, Charleston, call for 2 stories and basement; 100x170 ft.; brick; fireproof halls and stairs; reinforced concrete, tile and wood floors; Barrett specification roof; hot-water heat; electric lighting; hollow-tile corridor partitions; force draft ventilators; auditorium, 8 classrooms and principal's office on first floor; gallery of auditorium, 8 classrooms and library on second floor; gymnasium, domestic science and manual training departments, 2 special classrooms, furnace-room and ventilating equipment in basement; cost \$90,000 to \$100,000; plans and specifications at office of architects considering \$250,000 bond issue to erect above school, remodel Memminger High and Normal School, etc. (Lately noted.)

S. C., Fingerville.—School Trustees will erect building to replace structure noted damaged by fire.

Tenn., Chattanooga.—City, H. D. Huffaker, Commr., is having plans prepared by Clarence T. Jones, James Bldg., Chattanooga, for Howard high-school building; fireproof; tar and gravel roof; reinforced concrete floors; steam heat; electric lighting; cost \$125,000 to \$140,000. (Lately noted.)

Tenn., Henderson.—Freed-Hardeman College is having plans prepared by McGee & Lester, Memphis, for dormitory; 94x85 ft.; brick; metal roof; concrete and wood floors; electric lighting; heating not determined; cost \$30,000; bids opened about June 1. Address J. G. Hardeman, Henderson. (Lately noted.)

Tenn., Knoxville.—City opens bids about June 1 to erect high-school addition, auditorium and gymnasium; 190 ft. on Central Ave. by 200 ft. on 4th Ave.; ordinary construction; brick walls; wood joists; gravel roof; marble floors; return air line vacuum heat; electric lighting; cost \$150,000; Albert B. Baumann, Archt., 713 Henson Bldg., Knoxville. (Lately noted.)

Tenn., McKenzie.—City plans to erect 2 or 3 school buildings for McTyeire Training School for Vanderbilt University, Nashville; cost not less than \$50,000. Address WHF Regenold, Chrmn., 141 Magnolia St., McKenzie.

Tenn., Nashville.—George Peabody College plans to erect building; 5 stories; auditorium to seat 1000; laboratories and domestic science department, natatorium, etc.; accommodate 900 students.

Tex., Belton.—Baylor College for Women, Dr. J. C. Hardy, Prest., has plans by R. H. Hunt, Dallas, Tex., and Chattanooga, Tenn., for science building and dormitory; former to consist of 3 stories and basement, with 25 classrooms provided with laboratories; latter, 3 stories; 100 rooms; fireproof construction; cost \$200,000. (Previously noted.)

Tex., Ennis.—Telico School Dist. votes May 17 on \$12,000 bond issue to erect brick school building. Address District School Trustees.

Tex., McKinney.—Texas Conference Free Methodist Church will erect buildings for junior college; first structure (Administration) 1 story; 100x110 ft.; brick; concrete floors; cost \$75,000; other details not determined; F. R. Cline, Campbell, Tex., interested. (Lately noted.)

Tex., Ranger.—City School Board receives bids about June 20 to erect 2 ward school buildings to cost about \$50,000 and \$30,000, respectively; also having plans prepared for \$130,000 high-school building; contractors desiring to estimate may secure plans and details from Davis S. Castle, Archt., Abilene, Tex.; plans completed within 10 days.

Tex., Sherman.—City Comms. will call election in June on \$60,000 bonds to erect \$50,000 school to replace Fred Douglas High School lately noted damaged by fire, and \$10,000 for improvements to Jefferson and Washington schools; plans for Fred Douglas school call for 15 rooms; brick; concrete slab roof; concrete floors covered with wood; taking bids; H. O. Harrington, Prest. School Board. (Lately noted.)

Va., Alexandria County.—Alexandria County, Fletcher Kemp, Supt. of Schools, Fort Myer Heights, Va. (P. O., Roslyn), is having plans prepared by Frank Upman, Woodward Bldg., Washington, D. C., for high school; brick; 2 stories; cost \$35,000.

Va., Dillwyn.—Board of Public Instruction, Harris Hart, Supt., Buckingham, Va., will erect high-school building; cost \$12,000, including equipment.

Va., Gretna.—School Board, J. W. Bailey, Clerk, receives bids until May 10 on both brick and frame school building, 6 mi. from Gretna; 6 rooms and laboratory; plans and specifica-

tions at office Superintendent Ramsey's office, Chatham, Va.

W. Va., Fairmont.—Board of Education will call election May 20 on \$150,000 bonds to erect high school in East Side.

Va., Tazewell.—Tazewell County School Board plans to erect several rural schools; A. S. Grever, Supt. of Schools, Tazewell.

Stores.

Ark., Bixby.—J. J. Groetken, care of Groeten Pump Co., Aurora, Ill., will rebuild 2 store buildings lately noted damaged by fire; 50x90 ft.; brick; gravel roof; cement sidewalks; heating not determined, has natural gas; wants to correspond with contractor. (See Machinery Wanted—Building Material; Metal Ceiling; Plate Glass.)

D. C., Washington.—Charles E. Wire, Inc., 1413 H St. N. W., will erect 20 stores on 14th and Decatur Sts. (See Dwellings.)

Fla., Jacksonville.—A. S. Lutgen will erect brick building; cost \$15,000.

Fla., Miami.—Thomas Nolan, Omaha, Neb., is having plans prepared by Edward Nolan, Miami, for building; cost \$20,000.

Fla., Melbourne.—Mrs. Chas. T. McBride will erect building.

Ga., Atlanta.—Sterchi Furniture & Carpet Co., Joseph E. Johnston, Mgr., will rebuild store building noted damaged by fire at loss of \$75,000.

Ga., Athens.—W. W. and G. E. Scott are reported to erect store building on Clayton St.; cost \$35,000 to \$40,000.

Ga., Columbus.—James A. Lewis plans to erect 2 business buildings; 2 and 3 stories, respectively.

Ga., Colquitt.—Dr. P. E. Wilkins will rebuild structure on Main St. lately noted damaged by fire; 25x100 ft.; 2 stories; brick; tin roof; tile or cement floors; city lighting; cement sidewalks; cost without equipment about \$7,000. (See Machinery Wanted—Boiler and Engine; Heater; Lighting Plant.)

Ga., Macon.—J. P. Allen Co., Atlanta, leased building at Cherry and 4th Sts. and is reported to expend \$30,000 for improvements.

Ga., Tifton.—Frank S. Betz, Hammond, Ind., will erect building.

Ga., Valdosta.—Woodmen of the World will erect building; stores on ground floor. (See Association and Fraternal.) *

Ky., Henderson.—J. L. Smith is having plans prepared by H. E. Boyle & Co., 406 Furniture Exchange Bldg., Evansville, Ind., for store. (See Dwellings.)

La., Lake Charles.—John J. Khouri will erect brick business building on Ryan St.; contains 2 stories.

Md., Baltimore.—H. S. Block is having plans prepared by Smith & May, Calvert Bldg., Baltimore, for building at Cathedral and Eager Sts.; 45x112 ft.; steel and wood; tile and slate roof; wood floors; bids opened April 30. (Lately noted.)

Miss., Corinth.—B. F. Liddon will erect 2 brick store buildings.

Mo., Chaffee.—Union Building Co., W. C. Morris, Secy., is having plans prepared by Lindsay Architectural Co., St. Louis, Mo., for hotel, Lodge and store building. (See Hotels.)

Mo., Kansas City.—S. S. Kresge Co. will erect store building; 7 stories and basement; steel and reinforced concrete; plate-glass front; cost \$500,000.

Mo., St. Louis.—Ely & Walker Dry Goods Co., D. R. Calhoun, Pres., plans to erect 3-story addition to present Locust Street building.

N. C., Greensboro.—J. H. Thompson will

erect building to be occupied by Standard Parlor Furniture Co.; 50x70 ft.

Okla., Tulsa.—Tulsa Realty Co., 405 Robinson Bldg., plans to erect store building; 1 story; 70x75 ft.; brick; tar and gravel roof; cost \$11,000.

Okla., Tulsa.—D. W. Holmes, 18 W. 2d St., is having plans prepared by A. C. Fabry, 202½ S. Main St., Tulsa, for store building and warehouse at First and Elwood Sts.; 3 stories and basement; 40x150 ft.; brick and terra-cotta; Barrett roof; cost \$30,000.

Tenn., Knoxville.—J. G. Sterchi has plans by R. F. Graf & Sons, Knoxville, for agricultural-implement warehouse and salesroom; 52x150 ft.; 3 stories; brick; Carey 10-year roof; floors of mill construction; cost \$30,000; hand elevator, \$2500; bids opened May 5. (Lately noted.)

Tex., Ranger.—M. Plosky, Cisco, Tex., and Joe Goldenstein, Ranger, will erect store and office building at Main and Austin Sts.; 3 stories; brick and concrete; fireproof; 5 stores and 24 offices.

Tex., Velasco.—Ancient Free and Accepted Masons will erect lodge building; lower floor for bank and store. (See Association and Fraternal.)

Va., Norton.—J. Cohen will erect store building.

Va., Portsmouth.—Magnolia Camp, Woodmen of the World, will erect lodge building; store and office on first floor. (See Association and Fraternal.)

Theaters.

Fla., Daytona.—H. T. Titus will erect theater; fireproof; 70x110 ft.; hollow tile; tile roof; ornamental tile front; seating capacity 900; cost \$50,000.

La., Baton Rouge.—L. F. Hart and associates are reported to erect combination theater and motion-picture house on Third St.

Md., Baltimore.—Wizard Theater, 34-36 W. Lexington St., Jos. Neiman, Mgr., is having plans prepared by Oliver B. Wight, 110 Munsey Bldg., Baltimore, for alterations and addition to theater; brick and stucco; architect will receive bids May 1.

Mo., St. Louis.—Chas. Warner opens bids May 10 to erect picture theater at Maffie and Marcus Sts.; 46x118 ft.; ordinary construction; prepared roofing on wood rafters; steam heat; electric lighting; cost \$15,000; Nolte & Nauman, Archts., 614 Fullerton Bldg., St. Louis. Address Owner, care of Architects. (Lately noted.)

Oka., Fort Sill.—Liberty Theater, F. M. Cutting, Mgr., will erect theater; seating capacity 2500; cost \$27,000.

Tex., El Paso.—Lacoma & Quinn Co. is having plans prepared by Percy McGhee, City Hall, El Paso, for theater building; seating capacity 2000. (Lately noted.)

Va., Norfolk.—D. W. Holmes is having plans prepared for store building and warehouse. (See Stores.)

Tenn., Knoxville.—J. G. Sterchi has plans for agricultural-implement warehouse and salesroom. (See Stores.)

Va., Culpeper.—Culpeper Produce House, B. W. Clark, Prop., will erect warehouse.

Va., Richmond.—Construction Division, War Department, Washington, D. C., will erect balloon-storage building at aviation and general supply depot at Fulton. (See Government and State.)

BUILDING CONTRACTS AWARDED

Apartment-Houses.

Fla., Miami.—Alton Beach Realty Co. let contract to Bastin Realty Co., Miami, to erect 3 stories and apartments at Miami Beach. (See Stores.)

Md., Annapolis.—Mrs. C. A. Morrow let contract to Morrow Brothers, 1201 Fidelity Bldg., Baltimore, to alter apartment-house; 4 stories; 12 suites; cost \$35,000.

Tex., Wichita Falls.—Franklin Sales Co. let contract to erect building at 912 Lamar St.; first floor for automobile salesroom; second for living-rooms. (See Stores.)

Va., Norfolk.—Geo. D. Dunson, Bankers' Trust Co., let contract to Griffin Brothers, Arcade Bldg., Norfolk, to erect 2-family apart-

ment-house at Connecticut Ave. and Colonial Place; 2 stories; 32x60 ft.; cost \$12,000.

Va., Norfolk.—J. H. Nutter, 440 W. 34th St., let contract to W. F. Sawyer, 2514 Granby St., Norfolk, to erect apartment-house at 621-25 W. 34th St.; 82.8x70 ft.; brick; gravel roof; wood floors; steam heat; electric lighting; concrete sidewalks; no elevators; cost \$50,000; Chas. H. Nutter, Archt., 529 W. 34th St., Norfolk; construction begun. Address Contractor. (Lately noted.)

Warehouses.

Ark., Little Rock.—Texas Company will erect brick warehouse and garage at 1700 E. 9th St.; 1 story; cost \$26,000.

Ga., Leslie.—Sumter & Lee Warehouse Co. chartered with \$12,000 capital; will erect cotton warehouse.

Ga., Lyons.—Lyons Warehouse Co. Incptd. with \$10,000 capital by C. A. Rogers, G. W. Lankford, W. A. McNatt and others; will erect tobacco warehouse.

Ky., Lexington.—Tattersall Tobacco Warehouse Co., Charles Darnaby, Director, will erect warehouse; brick and concrete.

La., New Orleans.—Lukens Steel Co., James W. Porch, Mgr., 626-34 S. Peters St., will erect warehouse at Howard and South Peters Sts.; cost about \$300,000.

Md., Baltimore.—McDowell-Pyle Co., 221 W. Pratt St., will erect addition to warehouse; several stories.

Md., Baltimore.—James W. Crook, 417 Exchange Place, will erect 2 additional stories to warehouse; 23.9x54.9 ft.

Md., Woodberry (P. O., Baltimore).—Maryland Bolt & Forge Co., Falls Road, north of Smith Ave., will erect 1-story fireproof warehouse; 80x100 ft.; cost \$10,000.

N. C., Clinton.—Sampson Cotton Warehouse Co. chartered with \$75,000 capital by Marion Butler, S. H. Hobbs, L. A. Bethune and others.

N. C., Elkin.—S. A. Sharpe leased Liberty tobacco warehouse to be erected on Main St.; completion by September.

N. C., Oxford.—Company Incptd. by J. M. Bullock, J. B. Mayes and M. H. Bragg will erect warehouse.

N. C., Stoneville.—Union Tobacco Warehouse Co. Incptd. with \$25,000 capital by J. H. Glenn, J. B. Vernon and others.

Oka., Tulsa.—D. W. Holmes is having plans prepared for store building and warehouse. (See Stores.)

Tenn., Knoxville.—J. G. Sterchi has plans for agricultural-implement warehouse and salesroom. (See Stores.)

Va., Culpeper.—Culpeper Produce House, B. W. Clark, Prop., will erect warehouse.

Va., Richmond.—Construction Division, War Department, Washington, D. C., will erect balloon-storage building at aviation and general supply depot at Fulton. (See Government and State.)

Association and Fraternal.

Fla., Miami.—Alton Beach Realty Co. let contract to Bastin Realty Co., Miami, to erect negro lodge at Miami Beach; cost \$12,500; the Manufacturers Record is mentioned.

Henry La Pointe, Archt., Miami. (Lately noted.)

Mo., Columbus.—Knights of Columbus, Luke E. Hart, member Building Committee, La Salle Bldg., St. Louis, let contract to erect clubhouse; 3 stories; 120x140 ft.; composition and Spanish tile roof; cost \$75,000; Preston J. Bradshaw, Archt., International Life Bldg., St. Louis. (Lately noted.)

Bank and Office.

Ark., Little Rock.—American Bank of Commerce & Trust Co. let contract for general construction vault equipment and doors in connection with remodeling building at 3d and Main Sts.; 50x140 ft.; remodel 2 stories; fireproof; tar and gravel roof; reinforced concrete floors; cost about \$100,000; Mann & Stern, Archts., Little Rock; plans about ready, and will take bids for ornamental plaster, steel, ornamental iron and bronze, art glass, air washer, heating and ventilating, plumbing, ice-water system, etc. (Lately noted.)

N. C., Charlotte.—Robertson Estate let contract to J. A. Gardner, Charlotte, to remodel building for store and office building. (See Stores.)

C. C., Greenville.—Chester M. Goodyear Co., C. K. Goodyear, Treas., will rebuild office building on South Main St.; 60x40 ft.; 3 stories; brick; metal roof; pine floors; steam heat from manufacturing plant; city lighting; cost without equipment \$8000; contract let. (Lately noted damaged by fire.)

Tex., Eastland.—First State Bank, H. P. Breisford, Prest., let contract to erect 5-story bank and office building; ultimate plans call for 9-story structure; fireproof; stone and terra-cotta; 50x120 ft.; interior of marble and tile finish with marble wainscoting; vaults on each floor; double elevators; ventilating plant; ice-water plant; steam heat; cost \$150,000.

Tex., Lubbock.—Farmers' National Bank let contract to erect bank addition at Broadway and Cedar St.; brick; gravel roof; wood and tile floors; vapor heat; cost \$15,000; construction in progress. (Lately noted.)

W. Va., Elkins.—Keim & Keim let contract to Ward Brothers, Elkins, to erect office building; 20x44 ft.; plate glass and copper; fireproof; Holmboe & Lafferty, Archts., Clarksburg, W. Va.

Churches.

Ga., Columbus.—Trinity Episcopal Church let contract to Gifford & Whittaker, Columbus, to enlarge and improve building; extension 9 ft.; widening 6 ft.; brick; slate roof; marble tile floors; cost \$10,000; T. F. Lockwood, Archt., Columbus.

Md., Baltimore.—Emanuel Protestant Episcopal Church, Rev. Hugh D. Birkhead, Rector, 18 W. Read St., let contract to Morrow Brothers, 1201 Fidelity Bldg., Baltimore, for vestibule and tower 125 ft. high; slate roof; steam heat; cost \$125,000; W. H. Ritter, Archt., Boston, Mass. (Lately noted.)

Mo., St. Peters.—All Saints' Church, Rev. John Gires, Pastor, let contract to Duffuer & Stecker, International Life Bldg., St. Louis, to erect Sunday-school building; 3 stories and basement; 100x50 ft.; 4 rooms and chapel on first floor; bowling alleys, clubroom and gymnasium in basement; fireproof; brick and reinforced concrete; H. P. Hess, Archt., 4811 Cote Brilliante Ave., St. Louis. (Lately noted.)

N. C., Asheville.—Mt. Zion Baptist Church, Rev. J. R. Nelson, Pastor, Box 241, let contract to J. V. Miller to erect building at Eagle and S. Spruce Sts.; 92x66 ft.; brick; tile or slate roof; concrete basement floor; others, wood;

steam heat; cost \$27,250; T. E. Davis, Archt., Hillside St., Asheville. (Lately noted.)

Okl., Cherokee.—Building Committee Friends Church let contract to Edwin G. Smith, Cherokee, to erect building lately noted; 60x70 ft.; brick; shingle roof; wood floors; hot-air heat; electric lighting; cost \$16,000. (See Machinery Wanted—Concrete Mixer.)

Okl., Oklahoma City.—Baptist Church, Rev. Hale V. Davis, Pastor, 1018 E. 7th St., has plans by and let contract to C. W. Welborn, 406 Scott Thompson Bldg., Oklahoma City, to erect building at Exchange and Pennsylvania Aves.; 60x60 ft.; half-basement and upper story; concrete and frame; shingle roof; cement floor in basement; oak above; cost \$10,000; steam heat, \$200; electric lighting, \$200. Address The Pastor. (Lately noted.)

Courthouses.

Mo., Jefferson City.—Cole County voted \$100,000 bonds to repair courthouse, previously noted damaged by fire, for which Louis G. Schell, Moreau Drive, Jefferson City, is general contractor; F. B. Miller, Archt., Central Trust Bldg., Jefferson City. (Lately noted.)

Dwellings.

Fla., Daytona.—H. U. Whipple let contract to S. H. Gove, Daytona, to erect 3 cottages in Marshall Park; coquina and stucco construction.

Fla., Daytona.—W. W. Marshall let contract to S. H. Gove, Daytona, to erect 2 coquina and stucco cottages in Marshall Park.

Fla., Jacksonville.—Gertrude A. Mundie has plans by and let contract to Henry Taylor & Son, 2711 Herschell St., Jacksonville, to erect residence on St. John's Ave., between Osceola and Copeland Sts.; 44x44 ft.; brick veneer; asphalt shingle roof; wood floors; city lighting; cost without equipment \$6500; hot-air heat, \$250.

Fla., Miami.—Carl G. Fisher let contract to W. Marvin Allen, Miami, to erect proposed residence on Lincoln Road, Miami Beach; cost \$50,000; Henry La Pointe, Archt., Miami.

Fla., Miami.—Alton Beach Realty Co. let contract to W. Marvin Allen, Miami, to erect residence and garage at Alton Beach; cost \$30,000; Henry La Pointe, Archt., Miami. (Lately noted.)

Fla., Miami.—M. F. Brown, Boston, Mass., let contract to W. Marvin Allen, Miami, to erect residence and garage at Point View; cost \$26,000; Henry La Pointe, Archt., Miami. (Lately noted.)

Fla., Miami.—Ralph D. Polk, Indianapolis, Ind., let contract to Jerome W. Stuart, Miami, to erect residence; tile; cost \$12,000.

Fla., Seabreeze.—Mr. Breisford, Chattanooga, let contract to Jacob Espedahl, Daytona, Fla., to erect residence; 2 stories; hollow tile and stucco; tile roof; cost \$15,000.

Ky., Ashland.—Jno. W. Woods let contract to Dan Dixon, Ashland, to erect residence; 6 to 8 rooms.

Ky., Ashland.—J. F. Stewart let contract to Dan Dixon, Ashland, to erect residence; 6 rooms.

Ky., Ashland.—W. E. Faulkner let contract to Dan Dixon, Ashland, to erect 8-room residence.

Md., Baltimore.—Jack Burk, 1643 Appleton St., let contract to McIver Construction Co., 1402 Fidelity Bldg., Baltimore, to erect 20 residences; 2 stories; 22x34 ft.; total cost \$50,000; W. Sparklin, Archt., 1402 Fidelity Bldg., Baltimore.

Miss., Clarksdale.—Joseph Schram let contract to Sunflower Lumber Co., Clarksdale, to erect 6-room bungalow.

Miss., Clarksdale.—Mr. Nash of Dodds Wagon Works let contract to Sunflower Lumber Co., Clarksdale, to erect 5 or 6-room bungalow.

Miss., Clarksdale.—Hugh Sampe let contract to Jesse Harrington, Clarksdale, to erect bungalow; stucco and plaster exterior; hot-air heat; hardwood floors; 2 bathrooms; cost about \$10,000.

Miss., Clarksdale.—Jacob Fink let contract to Jesse Harrington, Clarksdale, to erect 2 bungalows; stucco and plaster exterior; hot-air heat; hardwood floors; 6 rooms each; total cost \$15,000.

Mo., St. Louis.—Wm. H. Burg let contract to Jas. A. Godfrey & Co., Wainwright Bldg., St. Louis, to erect residence; 2 stories and basement; 44x31 ft.; La Beaume & Klein, Archts., Chemical Bldg., St. Louis.

N. C., Asheville.—D. B. Morgan let contract to L. R. House, Charlotte, to erect residence at Sunset Parkway; concrete with outside walls of weatherboard; 8 rooms; cost \$10,000.

N. C., Charlotte.—E. B. Littlefield, 205 Mint St., let contract to R. L. Goode, Charlotte, to erect residence at Myers Park; 8 rooms; brick veneer; slate roof; hardwood floors; hot-water heat; electric lighting; cost \$15,000; L. L. Hunter, Archt., Charlotte. (Lately noted.)

S. C., Lancaster.—Charles D. Jones let contract to J. A. Gardner, Charlotte, N. C., to erect residence; cost \$20,000; W. H. Peeps, Archt., Charlotte; construction begun.

S. C., Piedmont.—Piedmont Manufacturing Co. let contract to Fiske-Carter Construction Co., Greenville, to erect number bungalows.

Tenn., Chattanooga.—W. P. McBroom, East Main St., let contract on percentage basis to A. F. Hohn, Chamberlain Bldg., Chattanooga, to erect residence in Ferger Place; 2 stories; brick; pine and hardwood floors; roof not decided; Louis H. Bull, Archt., Montague Bldg., Chattanooga. (Lately noted.)

Tex., Dallas.—Power Investment Co., O. A. Teal, Secy., 1004 Commerce St., let contract to W. B. Power, Wm. Davis and A. S. Childers to erect about 25 dwellings in Mount Auburn addition; 5 and 6 rooms; frame; slate-surfaced roofs; pine floors; cost about \$2500 each. Address Owner. (Lately noted to erect 7 dwellings.)

Tenn., Chattanooga.—Flemmack Home Co. let contract to McDevitt-Fleming Co., Chattanooga, to erect 16 bungalows in Highland Park; oak floors; sleeping porches; furnace heat; total cost \$90,000.

Tenn., Knoxville.—Bruce Keener let contract to A. D. McMurray, Knoxville, to erect residence on Lyon's View pike; colonial type; 2 stories and basement; 33x40 ft.; shingle; slate roof; interior, enameled woodwork and wainscoting; vestibule and porch floors of tile; hardwood floors elsewhere; 12 rooms, 3 sleeping porches, 3 baths; combined garage and servants' house includes space for 3 automobiles, 4 rooms and 2 baths; basement to contain vacuum cleaning equipment, laundry, heating plant, fuel storage-room, etc.; construct driveway to circle home from pike to entrance and to garage; Barber & McMurray, Archts., Knoxville.

Tenn., Knoxville.—Clarence E. Beaman let contract to erect residence in Park City; cost \$10,000.

Tex., Dallas.—W. M. Rountree let contract to P. M. Wright, Dallas, to erect residence on Lemmon Ave.; 10 rooms; 2 stories; brick veneer; slate roof; hardwood floors; electric lighting; cost \$17,500; hot-air heat, \$1000; H. B. Thomson, Archt., S. W. Life Bldg., Dallas. (Lately noted.)

Tex., Dallas.—Sam Dysterbach let contract to Walter Whitley, 2630 San Jacinto St., Dallas, to erect residence at Munger Blvd. and Swiss Ave.; inter-locking hollow tile; concrete

foundation; Oriental stucco on exterior; slate roof; hot-air heat; concrete, tile and quarter-sawed oak floors; Wolf plumbing fixtures; cost \$20,000; H. B. Thomson, Archt., 1203 Southwestern Life Bldg., Dallas.

Tex., Denison.—W. B. Munson, Jr., let contract to Walter Whitley, 2630 San Jacinto St., Dallas, to erect residence; 2 stories and basement; inter-locking hollow tile; concrete foundation; Oriental stucco exterior; slate roof; hot-air heating; oak, tile and concrete floors; Wolf plumbing fixtures; cost \$20,000; H. B. Thomson, Archt., 1203 Southwestern Life Bldg., Dallas.

Tex., Fort Worth.—George C. Clarke let contract to Taylor Building Co., Fort Worth, to erect colonial cottage in Chase Court; cost \$10,000.

Tex., Ranger.—Texas & Pacific Railway, E. F. Mitchell, Chief Engr., Dallas, let contract to Watson Company, Dallas, to erect ten 4-room workmen's cottages, agent's cottage and dormitory; frame; cypress shingle roofs; gas heat; electric lighting; total cost \$45,000. (Lately noted.)

Va., Richmond.—Davis Brothers, Inc., and Davis Land Co., Inc., have plans by and let contract to Davis Brothers, Inc., to erect number of dwellings on north and south side of Floyd Ave., between Allen and Granby Sts.; 20x38 ft.; brick; slag, slate and tin roofs; hot-water heat; electric lighting; cost \$5000 each. Address Contractor. (Previously noted.)

Government and State.

Md., Baltimore.—Offices.—Andres Knell, 406 Law Bldg., has contract to alter and repair old home of Maryland Historical Society, Saratoga and St. Paul Sts.; to contain offices of State Automobile Commission and Child Labor Bureau; 3 stories; cost \$25,000; J. Appleton Wilson, Archt., 800 Law Bldg., Baltimore. (Lately noted.)

Hospitals, Sanitariums, Etc.

Oka., Cherokee.—Alfalfa County General Hospital has plans by and let contract to E. G. Smith to erect hospital; 34x76 ft.; tile, brick and cement; asbestos roof; cement and tile floors; electric fixtures; cost \$16,000; heating, \$2500. (Lately noted.)

Tex., Dallas.—Dallas County Commsr.'s Court let contract to H. W. Link, Dallas, to erect addition to Woodlawn Tuberculosis Hospital; 150x40 ft.; 1 story; fireproof; reinforced concrete; built-up roof; concrete floors; accommodate 60 patients; cost \$50,000; F. J. Woerner, Archt., 503 Sumpter Bldg., Dallas. (Previously noted.)

Oka., Enid.—Enid General Hospital let contract to Grant M. Buxton, 202 Enid National Bank Bldg., to erect hospital building lately noted; 46x80 ft.; 3 stories; reinforced concrete; Vulcianite strip shingle roof; oak and tile floors; electric lighting; automatic passenger elevator; cost \$35,000; steam heat, \$6000; C. J. Cannon, Archt., Enid. (See Machinery Wanted—Building Material; Metal Lath; Corner Beads.)

Hotels.

N. C., Durham.—John H. and M. D. Harris let contract to erect 3 additional stories to 2 buildings on East Main St., to be leased to Malbourne Hotel; 128x38 ft.; 44 rooms and hall on 3d floor for dancing, banquets, etc.; connect buildings to hotel by hallways.

D. C., Washington.—Jefferson Hotel Co. let contract to R. P. Whitty Co., Union Trust Bldg., Washington, to erect hotel at 14th and I Sts.; 50x120 ft.; 12 stories; fireproof; steel and concrete; slag roof; concrete slab floors; vacuum steam heat; 3 electric elevators; cost \$600,000; Milburn, Heister & Co., Archts., Union

Savings Bank Bldg., Washington. (Previously noted.)

Oka., Okmulgee.—Arch Jennings and Dr. H. C. Post let contract to Patti-Moore Construction Co., Okmulgee, to erect hotel at main and Porter Sts.; 3 stories; 75x100 ft.; steel, brick, terra-cotta, hollow tile and wood joist construction; composition roof; wood floors; city lighting; cost \$70,000; steam heat, about \$10,000; Smith, Rea, Lovitt & Senter, Archts., Okmulgee and Kansas City, Mo. (Lately noted.)

Tex., Eastland.—C. U. Conneliee and associates let contract to erect hotel building; 6 stories; fireproof; brick and stucco; tile roof; 200 rooms, lobby and mezzanine parlor; cost \$250,000 to \$300,000; Henry T. Phelps, Archt., San Antonio. (Previously noted.)

Miscellaneous.

Fla., Miami—Bathing Pavilion.—Alton Beach Realty Co. let contract to Bastin Realty Co., Miami, to erect annex to bathing pavilion at Alton Beach; cost \$16,000; Henry La Pointe, Archt., Miami. (Lately noted.)

Schools.

Ky., Ashland.—Board of Education, Geo. F. Parks, Secy., let contract to Cox Construction Co., Ashland, to erect school building on East Ward St.; 42x67 ft.; 2 stories and basement; brick walls; composition roof; wood floors; cost \$18,243, exclusive of heating; J. M. King, Archt., Ashland. (Lately noted.)

Miss., Chatham.—Chatham Consolidated School Dist. let contract at \$16,488 to J. H. Myers, Jackson, Miss., to erect rural school building and teachers' cottage; 53x91 ft.; brick; asphalt slate roof; wood floors; Hero stoves; Wm. A. Stanton, Archt., Vicksburg, Miss. (Lately noted.)

Mo., Archie.—Board of Education, C. W. Pitcher, Secy., let contract to J. G. Robertson & Son, Laredo, Mo., to erect school building; 1 story and basement; 55x60 ft.; brick; stone trim; composition roof; cost \$14,000; J. H. Felt & Co., Archts., Grand Avenue Temple, Kansas City. (Previously noted.)

Oka., Oklahoma City.—City School Board let contract to C. M. Dunning Construction Co., Oklahoma City, to erect administration building at 400 N. Walnut St.; 1 story and basement; fireproof; brick; 12 rooms; heating plant; cost \$25,000; Layton & Smith, Archts., Majestic Bldg., Oklahoma City. (Lately noted.)

Tex., Spur.—School Board let contract to J. E. Sanders, Spur, to erect high-school building to replace structure previously noted damaged by fire at loss of \$30,000; brick construction.

Stores.

Ala., Easley.—Ramsey & McCormick, H. M. McDowell, local representative, let contract to Inglenook Construction Co., Real Estate Bldg., Birmingham, to erect building for F. W. Woolworth Co.; 33x140 ft.; 2 stories; stone, brick and reinforced concrete; tar and gravel roof; wood floors and ornamental iron; cost \$25,000; D. O. Whilldin, Archt., Title Guarantees Bldg., Birmingham.

Ark., Marianna.—Jarratt & Sons let contract to Jennings & Samuel, Marianna, to erect mercantile building on Poplar St.; 52x123 ft.; brick; Barrett roof; concrete floors; cost \$15,000; Mann & Gatling, Archts., Memphis, Tenn. (Previously noted.)

D. C., Washington.—Ella C. Macomb let contract to W. K. Rieve, 826 19th St. N. W., Washington, to repair store building at 1217 F St. N. W.; 4 stories; 24x110 ft.; cost \$20,000.

Fla., Daytona.—L. Adler has plans by and let contract to Jacob Espedahl, Daytona, to

erect addition for furniture store at Magnolia and Palmetto Aves.; 60x100 ft.; 1 story and basement added to present building; hollow tile; Barrett built-up 20-year roof; wood floors; cost \$12,000. Address Contractor. (Lately noted.)

Fla., Miami.—Alton Beach Realty Co. let to Jesse Harrington, Clarksdale, to remodel 3 stores and apartments at Miami Beach; cost \$15,000; Henry La Pointe, Archt., Miami. (Lately noted.)

Ga., Louisville.—L. R. Farmer let contract to J. W. Marchman, Milledgeville, Ga., to erect store building; 27.6x110.2 ft.; 2 stories; brick; Geo. C. Thompson, Archt., Atlanta.

Ga., Louisville.—W. F. Little let contract to J. W. Marchman, Milledgeville, Ga., to erect store building; 27.6x110.2 ft.; 2 stories; brick; Geo. C. Thompson, Archt., Atlanta.

Ga., Waynesboro.—R. C. Neely Co. let contract to J. B. Mobley, P. O. Box 99, Waynesboro, to erect 2 store buildings and complete one damaged by fire; cement floors; metal roof; plate-glass fronts; metal ceilings; cost about \$16,000. (See Machinery Wanted—Brick.)

Tex., Wichita Falls.—Franklin Sales Co., 717 8th St., let contract to W. Y. Hancock, Wichita Falls, to erect building at 912 Lamar St.; first floor for automobile salesroom; second, living-rooms; 30x50 ft.; brick; gravel roof; wood floors; no heating or lighting plants; cost \$6500, without equipment. (Lately noted.)

Miss., Clarksdale.—Blouin & Co. let contract to Jesse Harrington, Clarksdale, to erect store; plate-glass front; marble base; tile floor; Johnson-Harlow Lumber Co., Clarksdale, has contract for material.

Miss., Clarksdale.—King & Anderson let contract to Borman Lumber Co., Clarksdale, to erect store building; brick; 50x60 ft. (Lately noted.)

Mo., Kansas City.—F. T. Russell Carriage Co., W. K. Russell, 1532 Baltimore St., let contract to Silas B. Beck, 3746 Brooklyn Ave., Kansas City, to erect building at 26th St. and Warwick Way; 2 stories and basement; 54x115 ft.; cost \$20,000.

N. C., Charlotte.—Robertson Estate let contract to J. A. Gardner, Charlotte, to remodel 2-story building at Church and 4th Sts. for store and office building.

Va., Norfolk.—L. L. Stern, 935 Main St., let contract to A. M. Johnston, Arcade Bldg., Norfolk, to remodel and erect addition to building on Main St.; cost \$15,000.

Va., Richmond.—Gordon Wallace let contract to L. C. Jenkins, Richmond, to erect store and warehouse; 3 stories; brick; cost \$12,000.

Va., Roanoke.—W. P. Mundy, 5 Norfolk Ave., let contract to A. L. Marshall, 3½ Campbell Ave., Roanoke, to erect store building on Church Ave.; 50x200 ft.; 3 stories; cost \$40,000; H. M. Miller, Archt., 3½ Campbell Ave., Roanoke.

Theaters.

Tex., Eastland.—C. U. Conneliee and John N. Graves let contract to erect theater; 50x150 ft.; fireproof; seating capacity 1350; cost \$15,000.

Warehouses.

Mo., St. Louis.—Northwestern Consolidated Milling Co., 438 Theresa St., let contract to T. H. Ratz, 4333 Taft Ave., St. Louis, to erect warehouse; 3 stories; 50x130 ft.; concrete, steel and brick; rock foundation; cost \$60,000.

Va., Richmond.—Gordon Wallace let contract to L. C. Jenkins, Richmond, to erect store and warehouse. (See Stores.)

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Bags (Cotton).—G. A. Harlow, Southern Bldg., Washington, D. C.—Correspondence with manufacturers of cotton bags; capacities 8 and 16 qts.; lowest quotations f. o. b.

Bakery Equipment.—Wallace L. Long, Box 103, Rutherfordton, N. C.—Addresses of manufacturers of equipment for bakery.

Barrels, etc.—Hawley's Laboratories, Charlotte, N. C.—To correspond with manufacturers of barrels and small drums or containers.

Bearings (Ford Motor).—R. Albright, 600 1st Ave., St. Petersburg, Fla.—Prices on bearings running in stands for Ford motors.

Bits (Oil Well).—Thos. A. Benitean, Box 191, San Benito, Tex.—To arrange for manufacture of oilwell bits.

Boat (Fire).—Chas. S. McLean, 412 Citizens' Bank Bldg., Norfolk, Va.—Data and prices on fire boat.

Boilers.—Hackley Morrison Co., P. O. Box 1337, Richmond, Va.—40 H. P. locomotive type boiler on skids; 20 and 25 or 30 H. P. locomotive type boilers on wheels.

Boiler.—W. H. Emerson, Pachuta, Miss.—Prices on second-hand 300 or 350 H. P. water-tube boiler.

Boiler and Engine.—Dr. P. E. Wilkins, Colquitt, Ga.—Prices on 50 H. P. boiler, 40 H. P. engine.

Boilers.—Whit. P. Tunstall, Armory Bldg., Norfolk, Va.—Prices on boilers.

Boxes (Wooden).—See Canning Equipment.

Boxes (Candy).—See Candy-making Equipment, etc.

Boxes (Paper).—Powers Publishing & Manufacturing Co., Miami, Fla.—Addresses of manufacturers of small paper boxes and cartons for shipping and displaying.

Brick.—J. B. Mobley, P. O. Box 99, Waynesboro, Ga.—Prices on white glazed brick; 1½ x 3x9 in., enamel on 3-in. side.

Bridges.—See Drainage.

Bridge Construction.—Ozark Trail Road Improvement Dist., Poinsette County, W. H. Dilatush, Secy., Marked Tree, Ark.—Bids until May 27 to construct following bridges: Four 50-ft. steel-plate girder spans, width 15 ft. with alternate bids on steel-truss spans of same length and width; two 50-ft. steel-truss spans, width 16 ft.; 400-ft. concrete viaduct, width 18 ft.; 112-ft. "I" beam span, width 16 ft., and 95 cu. yds. reinforced concrete culverts; Morgan Engineering Co., Engr., Memphis, Tenn.

Bridge Construction.—Montgomery County Board of Revenue, Montgomery, Ala.—Bids until June 9 to construct 1288-ft. reinforced concrete bridge over Catoma Creek on Norman Bridge Road, with 18-ft. roadway; W. S. Keller, State Highway Engr.

Bridge Construction.—Kanawha County Commsr., Charleston, W. Va., and Lincoln County Commsr., Hamlin, W. Va.—Bids until June 4 to construct 200-ft. and 80-ft. span steel masonry bridge; also ¼-mi. road; cost \$8000; plans from F. G. Burdette, Engr., or State Road Dept., Charleston.

Bronze, Copper, etc.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington.—Bids until May 15 to furnish bronze, copper, brass tubing, copper, steel and brass wire, bolts, screws, nails, cotters, turnbuckles, chain links, steel wool, saws, shovels, cocks, valve discs, priming cups, curtain fasteners, wagon hubs and spokes, wooden handles, voltmeters and ammeters, pliers, oil and grease guns, launch lights, pigskin gloves, crayons, wire belt lacing, leather, saddles, brushes, linoleum and sand-

paper; blanks, etc., relating to circular (No. 1274) obtainable from Purchasing office or offices of Asst. Purchasing Agents, 24 State St., New York; 600 Common St., New Orleans; Fort Mason and San Francisco, and all U. S. Engr. offices.

Bronze, Copper, etc.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington.—Bids until May 15 to furnish bronze, copper, brass tubing, copper, steel and brass wire, bolts, screws, nails, cotters, turnbuckles, chain links, steel wool, saws, shovels, cocks, valve discs, priming cups, curtain fasteners, wagon hubs and spokes, wooden handles, voltmeters and ammeters, pliers, oil and grease guns, launch lights, pigskin gloves, crayons, wire belt lacing, leather, saddles, brushes, linoleum and sand-paper; circular No. 1274.

Building Material.—Grant M. Buxton, 202 Enid National Bank Bldg., Enid, Okla.—Prices on metal lath and corner beads for \$35,000 hospital building.

Building Material.—Alexander Stewart, Chester, S. C.—Catalog of building material.

Building Material.—J. J. Groetken, care of Groetken Pump Co., Aurora, Ill.—Prices on brick, cement, metal ceiling and plate glass for store buildings at Bixby, Ark.

Building Material.—Rev. C. L. Vaughan, Pastor Methodist Episcopal Church South, Davy, W. Va.—Prices and catalogs on building materials for church.

Candy-making Equipment, etc.—Tropical Fruit Products Co., 1706 14th Ave., Tampa, Fla.—Machinery for candy making and preserving; also glass containers, candy boxes and shipping cases.

Canning Equipment.—W. H. Sykes, Smithfield, Va.—Machinery to can tomatoes and potatoes; also cans and packing cases.

Cars (Box).—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—Prices on 6 second-hand standard-gauge box cars, 36 or 40 ft. long.

Castings.—Junius R. Case, Batesville, Ark. Prices on castings for hay balers.

Crushers (Rock).—F. M. Richards, Jr., Supt. of Turnpike Road in Avery County, Newland, N. C.—Data and prices on small portable rock crushers; prefer operation by gasoline motor of 8 to 10 H. P.

Crusher Rolls.—Helena Cotton Oil Co., E. B. Burke, Mgr., Helena, Ark.—Prices on second-hand 5 high 60-in. crusher rolls or one set same 48-in. crusher rolls.

Concrete Mixer.—Edwin G. Smith, Cherokee, Okla.—Prices on concrete mixer.

Concrete Mixers.—Johnston & Morgan, Engrs., Flat Iron Bldg., Atlanta, Ga.—Prices on concrete mixers.

Corner Beads.—See Building Material.—Grant M. Buxton.

Crusher.—W. T. Jones, 216 10th St., Lynchburg, Va.—Prices on crusher, 10-hr. capacity 100 cu. yds.; delivery Kanawha Falls, W. Va.

Crushers.—Johnston & Morgan, Engrs., Flat Iron Bldg., Atlanta, Ga.—Prices on stone crushers.

Doors (Vault).—Pee Dee Mfg. Co., Rockingham, N. C.—Names and addresses of manufacturers of bank vault doors.

Drainage System.—Grindle Creek Swamp, Pitt County, G. T. Leach, Chrmn., Greenville, N. C.—Bids until May 28 to construct canal; 1,500,000 cu. yds. excavation; with highway bridges; Harding & Rivers, Engrs.

Drainage System.—Inter-River Drainage Dist., A. H. Fredericks, Secy., Poplar Bluff,

Ark.—Bids until May 14 to construct drainage channels; 7,200,000 cu. yds. earth excavation; plans and specifications from Morgan Engineering Co., Engr., Memphis, Tenn.

Drier (Rotary).—C. B. Samuels, Volunteer Bldg., Chattanooga, Tenn.—Rotary drier.

Dry Dock.—Navy Dept., Washington, D. C.—Bids until May 19 to erect concrete dry dock at Charleston (S. C.) Navy-yard; drawings and specifications No. 3838 from Bureau and Rear-Admiral B. C. Bryan, Commandant of Charleston Navy-yard.

Electrical Equipment.—Whit. P. Tunstall, Armory Bldg., Norfolk, Va.—Prices on electrical equipment for charging batteries.

Electrical Supplies.—See Metals, Chemicals, etc.

Engine.—Dr. P. E. Wilkins, Colquitt, Ga.—Prices on 40 H. P. engine.

Engine (Fire).—John R. March, Engr., Duncan, Okla.—Prices on chemical fire engine.

Engine.—W. A. Matheson, Mayor, Toccoa, Ga.—75 H. P. crude-oil engine.

Engine.—W. H. Emerson, Pachuta, Miss.—Prices on second-hand Corliss engine; left hand.

Engine (Hoisting).—Chas. A. McLean, 412 Citizens' Bank Bldg., Norfolk, Va.—Prices on Sx10 cylinder hoisting engine without boiler.

Engines (Marine).—B. F. Tobin, Prest. Continental Motors Co., Detroit, Mich.—Prices on 12 marine engines capable of driving 32-ft. boat, 30-in. draft, 9-ft. beam at .2 mi. per hour.

Fertilizer Machinery.—Newport Fisheries Co., Morehead City, N. C.—Prices on machine to mix fertilizer.

Filter.—Geo. J. Adams, Consrt. Engr., 39 South St., New York.—Karl Kiefer filter with 22 cells.

Furnaces (Quicksilver).—Bell & Blake Co., 118 Field St., Dallas, Tex.—Estimate on installation two 20-ton Scott furnaces recovering quicksilver from cinnabar ores.

Generators (Turbo).—Richard Airey, 233 Broadway, New York.—Turbo generators; 2 pieces 440-480 volt, 3 phase, 60 cycle, 150-250 K. W. excitation, either separate or direct connected; 150 lbs. steam pressure, 2 lb. exhaust and 100 degrees super-heat.

Grinding (Stone) Machine.—T. H. Self, Martinsville, Va.—Prices on stone-grinding machine.

Hardware.—See Metals, Chemicals, etc.

Hammer.—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—Prices on Bement-Miles 1500-lb. double-frame steam forging hammer.

Hammer (Piledriver).—A. P. Gilbert, Durham, N. C.—Prices on small piledriver hammer; consider small outfit complete.

Hoppers (Nail-sorting).—Carolina Fruit Co., W. N. Hutt, Supt., Candor, N. C.—Correspondence with manufacturers of nail-sorting hoppers.

Heater.—Dr. P. E. Wilkins, Colquitt, Ga.—Prices on heater for boiler and pump for hot water.

Hoisting Equipment.—A. S. F., care of Manufacturers Record.—Hoisting outfit of 25 H. P.; bullwheel and clamshell bucket; capable of running under own steam; 36-in. gauge preferred; second-hand rig.

Ice-cream and Creamery Equipment.—W. L. Long, Box 103, Rutherfordton, N. C.—Data and prices on equipment for creamery and ice-cream plant.

Ice-plant Equipment.—W. L. Long, Box

103, Rutherfordton, N. C.—Data and prices on ice-plant equipment.

Ice and Cold-storage Plant Equipment.—Fuel & Supply Co., Elizabeth City, N. C.—Data and prices on equipment of ice and cold-storage plant.

Incinerator Plant, etc.—Panama Canal, A. L. Flint, Gen. Purchasing Officer, Washington.—Bids until May 23 to furnish incinerator plant, overhead crane, wagon platform scale, iron or steel sheets, vanadium steel springs, horse and mule shoes, brass, copper, monel metal, stereotype metal, sheet tin, copper and brass tubing, zinc, blue-printing machine, exhaust type blower, arc lamps and globes, motor generator sets, electric fans, insulators, watt-hour meters, receptacles, sockets, switches, steel and copper wire and cable, steel and iron rope, garbage cans, upright boilers, grommets, pipe fittings, lavatory supplies, iron soil pipe and fittings, valves, oars, marine clocks, anchor lights and hardware; blanks, etc., relating to circular (No. 1276) obtainable from Purchasing Officer and offices of Asst. Purchasing Agts., 24 State St., New York; 606 Common St., New Orleans; Fort Mason, San Francisco; also from all U. S. Engr. offices.

Iron (Galvanized).—C. A. Rollins, Pickham, Okla.—Prices on galvanized iron to cover elevator; 22x22 ft.; 24 ft. high.

Lighting Plant.—Dr. P. E. Wilkins, Colquitt, Ga.—Prices on lighting plant for 8 buildings.

Locomotive.—R. P. Johnson, Wytheville, Va.—Locomotive, 10 to 16 tons, 48-in. gauge; suitable for wooden rail; good condition; dealers' price.

Locomotive.—George B. Curd Co., Union Central Bldg., Cincinnati, Ohio.—7x12 24-in. gauge Dinky locomotive.

Locomotives.—W. H. Bradley, 221 Grant Bldg., Atlanta, Ga.—50 or 60-ton, 3-cylinder Shay locomotive, or possibly consider two 10x10, 3-cylinder engines; standard gauge; modern construction; pass Hartford or other standard insurance inspection.

Lumber (MHI).—Sadie Cotton Mills Co., D. C. Mauney, Secy.-Treas., Kings Mountain, N. C.—Prices on mill lumber for \$25,000 cotton-mill building.

Lunchroom Equipment.—W. L. Long, Box 103, Rutherfordton, N. C.—Data and prices on equipment for lunchroom.

Machine-shop Equipment.—Edward Linss, 4554 Virginia Ave., St. Louis, Mo.—Prices on combination punch and shear 20-in. throat, saws, drill presses, etc.

Machine Tools.—F. Magis, Ouffet, Belgium. Data and prices on machine tools; view to agency.

Mattress Machinery.—Pittsburg Cotton Oil Co., W. C. Hargrove, Prest., Pittsburg, Tex. Mattress-making machinery to handle oil-mill linters; machinery for excelsior mattress manufacturing.

Metal Ceiling.—See Building Material.—J. J. Grootenk.

Metal Lath.—See Building Material.—Grant M. Buxton.

Metal Fasteners.—Powers Publishing & Manufacturing Co., Miami, Fla.—Correspondence with manufacturers of metal-hose fasteners.

Metal-working Machinery.—W. and J. Specialty Mfg. Co., 111 Glenwood Ave., Atlanta, Ga.—Prices on metal-working machinery.

Mine Equipment.—See Shaft (Coal) and Tipple.

Motor.—H. M. Johnson, Gadsden, Ala.—Prices on new or second-hand 25 to 40 H. P. electric motor.

Motors (Electric).—Easton Machinery Co.

Easton, Pa.—Two 20 H. P. A. C. motors; 440-volt, 700 to 900 R. P. M.

Motor Cars, etc.—F. Magis, Ouffet, Belgium.—Data and prices on motor cars, motorcycles, machine tools, etc., view to agency.

Motors (Electric).—John M. Greene, 261 Drexel Bldg., Philadelphia, Pa.—75 and 100 H. P. direct-current motors, 250 volts, not over 675 r. p. m.; prices and full particulars in first letter.

Motors (Electric).—Sadie Cotton Mills Co., D. C. Mauney, Secy.-Treas., Kings Mountain, N. C.—Prices on electric motors and motor hangers for \$150,000 cotton mill.

Moving-picture Equipment.—R. Quintero, 454 S. Wilkinson St., Mobile, Ala.—Names and addresses of manufacturers of moving-picture equipment.

Nails, Spikes, etc.—Panama Canal, A. L. Flint, Gen. Purchasing Officer, Washington. Bids until May 21 to furnish nails, spikes, screws, hose, wheelbarrows, shovels, manila rope, cotton rope, candle wicking, rubber tires and tubes, packing, oakum, gaskets, chamois skins, burlap, asbestos gloves, leather and rubber belting, harness, rattan webbing, asphalt shingles, greenhouse material, plate and window glass, agateware, chinaware, glassware, tablespoons, tablecloths, towels, soap and polish, benzine, glue, lard oil, calcium chloride, caustic soda, lye, soda ash, paints and ingredients, Shannon cases, paper clips, typewriter ribbons, lead pencils, index cards, linen tags, cardboard, bristol board, paper and lumber; blanks, etc., relating to circular (No. 1275) obtainable from Purchasing Officer and offices of Asst. Purchasing Agts., 24 State St., New York; 606 Common St., New Orleans; Fort Mason, San Francisco; also from all U. S. Engr. offices.

Iron (Galvanized).—C. A. Rollins, Pickham, Okla.—Prices on galvanized iron to cover elevator; 22x22 ft.; 24 ft. high.

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Motor.—H. M. Johnson, Gadsden, Ala.—Prices on new or second-hand 25 to 40 H. P. electric motor.

Motors (Electric).—Easton Machinery Co.

nish; asbestos; mica and micanite; moulding pins; gas burners, heaters and stoves; ovens and fittings; resin; stearine pitch and paraffine wax; insulation material; seaming 2, 3 and 6-ply for manufacturing electric batteries; glass tubes for manufacturing electric batteries; cutlery; wire goods; all household and kitchen utensils; general hardware; fancy goods and novelties; glassware and China; toilet articles.

Paving.—City of Rocky Mount, Va., C. S. Greer, Mayor.—Bids until May 10 to construct 7763 ft. 6-in. macadam 18-ft. roadway; 3500 cu. yds. fill; excavation; 4100 tons stone.

Paving.—City of Moundsville, W. Va., L. L. Stidger, Clerk.—Bids until May 23 to pave Ash Ave. from 1st to 2d Sts., and Tomlinson Ave. from 7th to 8th Sts. with vitrified brick or block; specifications, etc., on file with Clerk.

Paving.—Dist. Comms., 511 District Bldg., Washington, D. C.—Bids until May 21 to pave streets with asphalt; specifications, etc., from Chief Clk., Engr. Dept., 427 Dist. Bldg.

Paving.—City of Statesville, N. C.—Bids until May 20 to construct 100,000 yds. street paving and 10,000 yds. concrete sidewalks; L. F. Ervin, Clerk.

Paving.—Haskell County Comms., J. P. Kennard, County Judge, Haskell, Tex.—Bids to construct State Highway No. 39; 6982 cu. yds. earth excavation; 30,863 cu. yds. borrowed excavation; 10.1 mi. light grading; 410.25 cu. yds. concrete, etc. O. L. Leonard, County Engr.

Paving.—City of Cumberland, Md., Ralph L. Rizer, City Engr., City Hall.—Bids until May 15 to curb and pave 8 streets; 9135 ft. concrete curbing, 7050 sq. yds. concrete paving, 930 sq. yds. wood-block paving, 14,200 sq. yds. brick paving (semi-monolithic), miscellaneous sewer work, etc.; alternate bids on 11,280 sq. yds. sheet asphalt paving; plans and specifications on file with City Engr.

Paving.—City of Waxahachie, Tex., Carroll Todd, Mayor.—Bids until May 9 to construct 66,000 sq. yds. paving and 27,000 lin. ft. curb or curb and gutter; bids on vertical fiber on 5-in. concrete base; asphaltic concrete on 5-in. concrete base; 1 and 2-course concrete, 6 in. thick; plans and specifications on file with R. T. Smith, City Engr.

Paving.—City of Winter Park, Fla., Dudley Matthews, Clerk of Council.—Bids to construct 19,000 yds. grouted brick paving, 18,000 lin. ft. 4x10-in. cement curbing and 2500 ft. storm sewer; specifications and file with Clerk.

Paving.—City of Nashville, Tenn., William Gupton, Mayor.—Bids until May 20 to construct bitulithic, asphaltic concrete, re-cut granite block, wood block and macadam paving (oil and gravel surface treatment); specifications from Wm. W. Southgate, City Engr.

Paving Material.—John R. March, Engr., Duncan, Okla.—Prices on paving material.

Paving Blocks, etc.—Comms. District of Columbia, 511 District Bldg., Washington, D. C.—Bids until May 21 to furnish and deliver asphalt paving blocks; repressed, vitrified, sewer invert bricks, castings, asphalt paving cement, Portland cement, road oils, tars and bituminous patching material, fuel oil, paving pitch and terra-cotta sewer pipe, during year July 1, 1919, to June 30, 1920; proposal forms, specifications, etc., from Purchasing Officer, Room 320 District Bldg.

Pumps.—John R. March, Engr., Duncan, Okla.—Prices on combination pumps.

Pump.—Dr. P. E. Wilkins, Colquitt, Ga.—Prices on pump for hot water.

Pump (Power), etc.—W. T. Jones, 216 10th St., Lynchburg, Va.—Prices on power pump.

2-in. suction and 2-in. discharge; 2-in. pipe; delivery Kanawha Falls, W. Va.

Pump.—Universal Light & Power Co., 44 Drayton St., Savannah, Ga.—Electrically-driven air lift to force 40 gals. per minute in tank 10 ft. above ground, from 4-in. well; water 30 ft. below surface.

Piling (Sheet).—A. P. Gilbert, Durham, N. C.—Prices on 2000 sq. ft. light-section sheet steel piling, about 20 ft. long; give make, weight per sq. ft. and length; new or second-hand.

Peanut Machinery.—Pittsburg Cotton Oil Co., W. C. Hargrove, Prest., Pittsburg, Tex.—Prices on peanut thresher and machinery to finish product.

Plate Glass.—See Building Material.—J. J. Grootenhuis.

Pipe.—Sadie Cotton Mills Co., D. C. Mauney, Secy., Treas., Kings Mountain, N. C.—Prices on sprinkling and heating system for \$150,000 cotton mill.

Printing Press.—United Machine Works, 57 W. 3d St., New York.—Data and prices on printing press for 12-page daily paper.

Rails.—M. K. Frank, Frick Bldg., Pittsburgh, Pa.—Two mil. girder rails, 7 in. high.

Rails.—Ricketts & Co., 280 Madison Ave., New York.—420 tons 36 to 40-lb. rails; second hand.

Rails.—George B. Curd Co., Union Central Bldg., Cincinnati, Ohio.—2 mil. 20 to 24-in. gauge portable track.

Road Construction.—Great Falls Farms Co., Alfred T. Jones, Engr., Roads and Bridges, Great Falls, S. C.—Bids until May 12 to construct road from Great Falls to Wateree; 10 and 15 mi. section; 5000 cu. yds. per mi. with stream crossings of 20,000 cu. yds. additional.

Road Construction.—Poinsett County, Ozark Trail Road Improvement Dist., W. H. Dilatash, Secy., Marked Tree, Ark.—Bids until May 27 to construct 16 mi. earth road embankment, including 227,200 cu. yds. earth excavation, 21 acres clearing, 36 acres clearing and grubbing, 1340 ft. 18-in. corrugated pipe, 450 ft. 24-in. corrugated pipe, 90 cu. yds. plain concrete headwalls; Morgan Engineering Co., Engr., Memphis, Tenn.

Road Construction.—Chester County Highway Comrs., Chester, S. C.—Bids until May 15 to grade and top soil 9.46 mi. of Saluda Road, between Chester and York County line; 44,000 cu. yds. excavation; 25,500 cu. yds. top soil; 240 cu. yds. concrete and pipe culverts; plans from State Highway Dept., Columbia.

Road Construction.—Brown County Comrs., R. E. Lee, County Judge, Brownwood, Tex.—Bids until May 12 to grade and surface with stone or gravel 10.98 mi. of highway, bituminous surface treatment, and placing 700 cu. yds. concrete for drainage structures; plans from R. A. Nichols, Highway Engr., Brownwood, and State Highway Dept., Austin, Tex.

Road Construction.—Road Trustees of Banner Township, Johnston County, Yancey Moore, Chrmn., Smithfield, N. C.—Bids to construct roads; bids opened May 3.

Road Construction.—Newberry County Comrs., Newberry, S. C.—Bids until May 13 to grade and top soil 5.63 mi. of Piedmont Highway, between Little Mountain and Prosperity; 28,000 cu. yds. earth excavation; 13,200 cu. yds. top soil and pipe culverts; specifications and plans from State Highway Dept., Columbia, S. C.

Road Construction.—Colorado County Comrs., John Hastedt, Clerk, Columbus, Tex.—Bids until May 15 to construct 17 mi. road; 34,000 cu. yds. excavation; 24,000 cu. yds. embankment; 9 mi. grader work; 38,000 cu. yds. gravel, etc.; plans and specifications

on file with State Highway Dept., Austin, Tex.; District Engr., 501 Wheat Bldg., Fort Worth, Tex., and County Engr., Columbus.

Road-construction Equipment.—Louis Rich Construction Co., Plainview, Ark.—Prices on road equipment to construct 60 mi. asphalt macadam highway, including steel bridges, culverts, earthwork, etc.

Road Construction.—City of Ellijay, Ga., Clark Ray, Mayor.—Bids May 15 for .56 mi. concrete road; \$16,000 available; Johnston & Morgan, Engrs., Flat Iron Bldg., Atlanta.

Road Grading.—Great Falls Farm Co., Great Falls, S. C.—Bids until May 12 to grade 25 mi. road from Great Falls to Wateree; average 5000 cu. yds. per mi., with several stream crossings of 20,000 cu. yds. additional; let contract in 2 sections of 10 and 15 mi., respectively; information from Alfred T. Jones, Engr., Roads and Bridges.

Road Material.—Johnston & Morgan, Engrs., Flatiron Bldg., Atlanta, Ga.—Prices on concrete and sand.

Road Machine.—Richland County Comrs., S. H. Owens, Supvr., Columbia, S. C.—Bids until May 29 to furnish road machine.

Road Rollers.—Jewel Supply & Equipment Co., 34 S. Calvert St., Baltimore, Md.—Five and 8-ton tandem steam roller.

Sash and Door Machinery.—Makepeace Box & Lumber Co., Sanford, N. C.—Prices on second-hand sash and door machinery, including tenoners, pannell raiser, chain mortisers, window-frame machines, diagonal planer, hand joiners and single surfer.

Sawdust Machinery.—J. H. Reynolds Lumber Co., Bristol, Va., Tenn.—Machinery for converting kiln-dried shavings into sawdust or wood-flour.

Sewer Construction.—City of De Leon, Tex., A. M. Pate, City Secy.—Bids to construct sanitary sewer system and disposal plant; former requires 31,700 ft. 6-in., 8600 ft. 8-in. and 1450 ft. 10-in. pipe, 40 manholes; latter, 2300 ft. 8-in., 6870 ft. 6-in., 4230 ft. 4-in. cast-iron pipe, 9400 ft. 2-in. block pipe, etc.; bids opened May 5; plans and specifications from Mayor, De Leon, and Henry Exall Elrod Co., Engr., Dallas, Tex.

Shaft (Coal) and Tipple.—C. F. Kleiderer, Henderson, Ky.—Bids open for construction of coal shaft 7x14-ft. in the clear and tipple to cover 4 tracts; also bids on equipment.

Shafting, Belting, etc.—H. M. Johnson, Gadsden, Ala.—Prices on shafting, belting and pulleys.

Shear.—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—Prices on second-hand Covington No. C shear.

Steel and Metal Castings.—W. and J. Specialty Mfg. Co., 111 Glenwood Ave., Atlanta, Ga.—Prices on rolled steel, both flat and round; small cold-rolled steel shafting, % and 1/2 in. diam.; nickel-plate; bolts; screws; wire; maleable iron; aluminum and brass castings.

Shovel (Steam).—W. T. Jones, 216 10th St., Lynchburg, Va.—Prices on 5/3-yd. steam shovel; delivery Kanawha Falls, W. Va.

Steel Forms.—W. T. Jones, 216 10th St., Lynchburg, Va.—Prices on steel forms for 5-in. road; delivery Kanawha Falls, W. Va.

Tanks (Wood).—A-62, care of Manufacturers Record, Baltimore, Md.—Three wood tanks; 100,000 gal. each; made of Oregon fir or equal; quote knocked-down price f. o. b. cars; mail full specifications giving length, height, thickness of staves and bottom, number and size of hoops and capacity.

Tank and Tower.—Sadie Cotton Mills Co., D. C. Mauney, Secy., Treas., Kings Mountain, N. C.—Prices on fire-protection tank and tower for \$150,000 cotton mill.

Trolley System.—Chas. W. Stolze, War Dept., Aviation Gen. Supply Depot, Richmond, Va.—Estimates on installation overhead trolley system; 4500 to 5000 ft.; for handling Liberty engines.

Trucks.—General Contracting Co., 465 Central Ave., St. Petersburg, Fla.—Prices on new or second-hand house-moving trucks.

Trucks (Motor).—W. T. Jones, 216 10th St., Lynchburg, Va.—Prices on 2½ or 3-ton motor trucks; delivery Kanawha Falls, W. Va.

Water System.—Arthur L. Auvil, Dade City, Fla.—Data and prices on system to lift water from spring to house.

Well-drilling Machinery.—Pan Bowl Oil & Gas Co., T. H. Dennis, Engr., Jackson, Ky.—Prices on well-drilling machinery.

Wirework.—Empire Construction Co., Douglas, Ga.—20 window guards with heavy wire outside rim, size opening 3 ft. 4 in. by 7 ft. 10 in., with 3-in. arch, making guard 8 ft. 1 in. in center.

Wheels (Tractor).—Jensen Hardware & Machine Works, Jensen, Fla.—Tractor wheels; 38 or 40-in. diam.

Woodworking Machinery.—W. and J. Specialty Mfg. Co., 111 Glenwood Ave., Atlanta, Ga.—Prices on woodworking machinery.

Wood Splitters.—Lummus Machinery Co., 211 Magnolia St., Spartanburg, S. C.—To correspond with manufacturers of wood splitters.

Railroad Construction

Railways.

Ala., Brewton.—J. N. Gillis & Son of Brewton have been awarded contract to extend the logging railroad of the Vredenburgh Saw Mill Co. from Vredenburgh, Ala., toward Camden, Ala., to open up timber land; work heavy.

Ark., Charleston.—A railroad spur 3½ mi. long, for which material has arrived, will be built immediately from a connection with the Arkansas Central Railroad at Charleston to the Haskell coal mines.

Ky., Hopkinsville.—Construction has begun on a branch railroad, 6 mi. long, from a connection with the Illinois Central Railroad to Dawson, Ky., for conveyance of material for building a Government hospital at Dawson.

Ky., Hulen.—Black Mountain Railroad forces have just completed its extension from Hulen to the head of Packett's Creek, 8 mi.

Tex., Houston.—The city has closed contract with the Crown Oil & Refining Co. for the latter to build a railroad 1½ mi. long from the Sinclair refinery to the Crown plant at a cost of \$40,000; eventually the city is to take over the road.

W. Va., Marlinton.—Atlantic & Western Railway Co. of Marlinton, capital stock \$5000, has been inceptd. by J. A. Sydenstricker, J. W. Hill, A. P. Edgar, S. L. Brown and T. S. McNeel, all of Marlinton.

House Moving Shown in Pictures.

"Moving Pictures." This is the title of a little book of pocket size, but it does not relate to the notable follies of the films, for it is devoted to pictures of house-moving done by the forces of John Eichley, Jr., Company, South 20th and Wharton streets, Pittsburgh, Pa. Among other things it says: "While some of the work shown may appear too difficult and costly to have warranted the expenditure, each contract was handled as a commercial proposition to the profit of the owner." The illustrations show all kinds of buildings, large and small, moved or being moved by this concern. Some of the engineering feats accomplished are truly wonderful.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

New Have Offices in Philadelphia.

Haskins & Sells, certified public accountants, have opened offices in Philadelphia, these being located in the Franklin Bank Bldg. under the management of Edmund C. Gause, C. P. A., as resident partner, the new opening being to relieve congestion in their Eastern offices caused by pressure of work arising in adjacent industrial centers. The operations of Haskins & Sells include auditing for leading insurance companies, railroads, manufacturing and trading enterprises, and banks. In addition to which they have recently been engaged by the United States Liquidation Commission in relation to the financial conditions existing between the United States and its Allies in the war.

New York Branch Established.

The Cement Products Co., manufacturing the "Sanison" sewage-disposal systems, with main offices at Wilmington, N. C., have opened a branch sales office at 39 Cortlandt St., New York City, under the charge of J. F. Harris, who is vice-president of the company.

New Chicago Office.

The new Chicago office of the Van Dorn Electric Tool Co. of Cleveland, O., manufacturers of portable electric drills, reamers and grinders, is situated at 527 S. Dearborn St. and extends through to 528 Plymouth St., where the company has increased accommodations necessary for its expanding business. William Cottrell is sales manager in charge.

An Unusually Fine Flour Mill.

The Best Farmers Milling Co.'s large new flour mill at Des Moines, Iowa, which takes the place of its old and comparatively small mill which was burned, has a daily capacity of 1250 barrels of flour, 250 barrels of corn flour and meal, and 1500 cases of pancake flour. It is fireproof, reinforced concrete with every fireproof feature known to mill-construction, including steel elevators and snouting. The up-to-date equipment of this modern mill includes eight 9 by 30 and ten 9 by 36 Wolf "Super Type" ball-bearing, double roller mills, three No. 86 Style A-48 sieve Wolfsifters, and two No. 86-56 sieve Wolfsifters; besides other Wolf machines as follows: 11 Improved middlings purifiers, two 14-inch double-disk aspirators, 14 improved centrifugal reels, an upright metal bran duster, two heavy-duty friction-bran packers, five heavy-duty flour packers, and one automatic small-seed packer, three Draver feeders and mixers, three 45-inch exhausters, employee elevator with safety stop, two-way flour conveyors and conveying, elevating and driving machinery complete; all this equipment being made and installed by the Wolf Company of Chambersburg, Pa. Electricity is employed for operating and lighting the mill.

In Business on Own Account.

P. F. Sheean having resigned as treasurer of the J. J. McCabe Lath & Machinery Corporation, Singer Bldg., New York, has gone into the new and second-hand machinery business on his own account, with office in the same building. Mr. Sheean was connected with the McCabe organization for 20 years, having begun work as a stenographer, but several years ago he was elected secretary and later treasurer of the corporation.

He had charge of the sales and advertising for a number of years.

Will Reopen May 15.

Joseph E. Bray announces as former sales agent of the J. Bray Slate Co., 45 Central Ave., East Bangor, Pa., that his father, Mr. Milford Bray, and himself will reopen their office in the North for the sale of slate burial vaults and roofing stock on May 15, upon their return from Florida, where they have spent the winter.

Looking After Foreign Business.

Joseph T. Ryerson & Son, "Iron-Steel-Machinery," Chicago, of which Clyde M. Carr is Prest., and Joseph T. Ryerson, Vice-Prest., announce that Marcel E. Cartier recently sailed for France, after being in this country on a brief visit, having looked after the firm's interests in France for the past two years. John H. Romann, also sailed for France lately and these two gentlemen will have headquarters in Paris to look after business in France, Belgium, Holland, Switzerland, Italy, Spain and Portugal. Paul H. Schatzman sailed for Rio de Janeiro recently to temporarily take care of the firm's interests in Brazil, Argentina and Peru, but about August he will proceed to Europe and thence via the Suez Canal to India, China and Japan. A. L. G. Gentile will establish headquarters in London to look after trade in Great Britain and Scandinavia. He will sail about the end of May. Later, other foreign representatives will also take up their respective territories.

Sewer-Cleaning Machine.

P. J. Healey, 30 Church St., New York, has invented a sewer-cleaning machine which enables cleaning to be accomplished without danger of poisoning workmen with sewer gas. This device consists, broadly speaking, of a hollow body mounted upon wheels. It is open only at one end, this being provided with a shovel to collect the substance which is to be removed. Pulleys and ropes operated by power from an engine on the surface of the ground constitute the means for moving the machine through a sewer. When the machine has collected all the material it can hold it is drawn to the surface, the contents are emptied into a wagon, and it is then returned to the sewer through the manhole for as many more trips as may be required to clean out. The presence of water in the sewer, even if in considerable quantities, does not prevent operation of the machine. It will clean out mud, sand, gravel, clay and other solid material effectively. Even if a sewer be full of water, the machine can be operated with success.

Memorial to William Lodge.

The employees of the Lodge & Shipley Machine Tool Co. of Cincinnati, O., wanted a suitable memorial to William Lodge, and therefore they commissioned Clement J. Barnhorn of that city to design a bronze tablet, which has now been completed and placed on the wall in the machine tool shop. The tablet bears a portrait of Mr. Lodge in relief, with the accompanying inscription: "1848-1917. In honor of William Lodge, whose kindly heart and helping hand will always be remembered, this tablet has been placed here by his grateful employees."

"Flex" Power Distributor.

To meet the requirements of users of belt preservatives, the Improved Surface Manufacturing Co., North Tonawanda, N. Y., has a patented applier to care for the wants of belt operators in safe, sane and sanitary way so that highest speed can be obtained by increased traction, with upkeep and condition properly considered. Furthermore, it is said that in running high-speed belting danger may be altogether eliminated by the rubber contact on this apparatus with the speeding belt, and a child may do that which in many factories is delegated to a man. No matter how small a belt or how large the Flex Power Distributor, as the applier is called, glides smoothly over the surface distributing at all points the material to preserve it and make it non-slipping.

Industrial Chemists.

It is announced that J. Bernard Robb, M.S., analytical and consulting chemist, has formed a partnership with Robt. B. Arnold, M.S., chemical engineer, under the firm name of Robb & Arnold, Industrial Chemists, with office and laboratory at 4½ N. 11th St., Richmond, Va. The firm will make analyses of all materials, fertilizers a specialty. They will also develop manufacturing processes, besides studying and reporting upon raw materials and waste products.

Has Established Foreign Trade Department.

The Sullivan Manufacturing Co., manufacturers of mining and quarrying machinery, People's Gas Bldg., Chicago, has organized a foreign trade department, with F. W. Copeland, who was formerly attached to the company's St. Louis office, as manager, with headquarters in Chicago. This new department will co-ordinate and assist the work of the foreign branches and agents of the company, which has well-established branch offices with its own organizations, at London, Salisbury House; at Paris, 18 Avenue Parmentier; at Santiago, Chile, Casilla No. 27, and at Sydney, N. S. W., Australasia Chambers, Martin Place. Engineering agencies of established standing also handle Sullivan products in Christiania, Norway; Amsterdam, Holland; Gijon, Spain; Turin, Italy; besides Algiers, Tunis, Johannesburg, Durban, Shanghai, Tokyo, Lima and Buenos Aires. The recent issue of "Mine and Quarry," published by the company and containing this announcement, is a very interesting number.

Chicago Branch in Larger Quarters.

The Chicago branch of the General Asbestos & Rubber Co. has occupied its new quarters at 14 N. Franklin St. On account of the rapid growth of demand for "Garcos" asbestos products the old quarters at 106 W. Lake St. became inadequate, but the new location has increased floor space and other facilities necessary for continued expansion. The branch in Chicago was established about two years ago to take care of the Western and Northwestern business of the General Asbestos & Rubber Co., whose home offices are in Charleston, S. C., and a complete line of asbestos brake lining, packings and textiles will be carried to promptly fill orders.

Offices in Pittsburgh and Chicago.

Badenhausen Company of Philadelphia, manufacturers of wafer-tube boilers and high-grade engines, announces the opening of additional sales offices in Pittsburgh, 311 Jenkins Bldg., under the management of A. D. Neeld, Jr., and also at Chicago, 1225 Marquette Bldg., under the management of J. F. O. Stratton, who will handle inquiries from their respective territories.

Is Now Associated With General Goethals.

Gen. George W. Goethals announces the association of A. E. Borie, president of Savage Arms Corporation, with George W. Goethals & Co., Inc., consulting engineers, 40 Wall St., New York. This concern is a well-rounded and balanced organization, capable of undertaking investigations of practically any form of industrial enterprises, in addition to the engineering skill for which General Goethals is widely known, especially for his work on the Panama Canal. Those composing the organization, in addition to General Goethals and Mr. Borie, are Robert E. Graham, Charles C. Jamieson, George H. Houston, John C. Jay, Jr., George M. Wells and William F. McGuire.

Car Building Company at Wichita Falls.

The Southern Railway Car Co., a tank car, railway car and street car manufacturing company, has been organized at Wichita Falls, Tex., with James A. Jones as president, office being at 721-A Ohio avenue. Besides building cars, the company will also operate repair shops.

Engineering and Contracting.

Leigh Hunt announces the formation of a new organization, the Leigh Hunt Company (successor to the Hunt Engineering Co.), Kansas City, Mo. The company has opened offices in the Reliance Bldg. and will engage in general engineering and contracting.

General Manager Appointed.

The American Steam Conveyor Corporation, Chicago, has announced the appointment of Charles H. Florandin as general manager of its Eastern territory, with headquarters at the company's New York office, 110 W. 40th St. Mr. Florandin, who assumed his new duties on May 1, is a native of France and was technically educated at the Lycee de Marseilles. He is an engineer by profession, and on coming to the United States some years ago did important work with the Brooklyn City Railway when that road was being electrically equipped. Later he was with the C. & C. Electric Co., the Western Electric Co. and the National Electric & Welding Co., which latter he organized. During the war he was a member of the welding committee of the Emergency Fleet Corporation.

Trade Literature.**A New Engineering Firm.**

Willis E. Ayres, consulting engineer, has announced that Garner W. Miller is associated with him under the firm name Ayres & Miller, with offices at 616-620 Randolph Bldg., Memphis, Tenn. This partnership recently became effective, the new firm specializing in road, drainage and flood protection engineering.

Overhead Electric Hoists.

The Electric Hoist Manufacturers Association, 9 W. 40th St., New York City, has issued an interesting and instructive publication bearing the title, "The Strong Arm of Industry," the aim of which is to publicly present an adequate conception of the almost limitless field of usefulness for overhead electric hoists, and a comprehensive idea of their adaptability to practically every branch of industry. While thousands of electric hoists are already in constant use for hundreds of widely differing purposes, there are many kinds of hoisting and conveying work that are being performed by other means which could be done quicker and more economically by them. The 22 different applications of these hoists pictured in this bulletin, although they do not indicate the entire scope of their use-

fulness, may nevertheless suggest to readers an adaptation to their lines of work which would be of great advantage to them. The publication is finely printed and the illustrations are very distinct.

Graver House Organ for Employees.

The first edition of a house organ published by the Wm. Graver Tank Works, East Chicago, Ind., for the benefit of its employees, has appeared. It is a four-page paper 8½ by 11½ inches in size, and is illustrated with cartoons and reproductions of photographs. K. W. Bartlett, assistant general manager of the company, is manager of the new publication, and C. B. Swanson is editor. The paper is issued to develop bonds of fellowship among employes by disseminating information of interest to them and the company. The paper as yet has no name, but a prize of \$10 is offered for one. It will be published twice a month.

Cargo Cranes.

Terry cargo cranes are given a complete description accompanied by illustrations in Bulletin No. 3, issued by the Edward F. Terry Manufacturing Co., Grand Central Terminal, New York City, whose works are at Harrison, N. J. These cranes are employed in loading and unloading vessels, and have high speed, simplicity of operation, and other very desirable features which enable them to perform the work accurately, safely and expeditiously. The bulletin goes extensively into its subject and any one interested in these machines will find every question answered satisfactorily in its pages. The company also makes cranes for other uses, besides contractors' equipment, derricks, hoists, plate castors, etc.

All About Pile Hammers.

A new pile hammer bulletin, which is numbered 25, has been issued by the McKiernan-Terry Drill Co., 15 Park Row, New York city. It covers double-acting steam hammers of various sizes for driving the lightest sections of wood or steel sheeting up to the largest timber or concrete piles. It also gives information concerning the use of the company's hammers made for pile pulling. As to the first-mentioned hammers, the bulletin remarks: "It is a well-established fact that sheet piling can be driven faster with a double-acting hammer than with any other type. Its rapid and constant blows keep the piling in constant motion and are obviously more effective than the fewer blows of a hammer which depends upon its weight alone for driving energy." It is also noted that this type of hammer is particularly advantageous for driving batter piling. The bulletin is copiously illustrated, and there are full particulars relating to design and construction, with data tables complete.

Reinforced Spiral Pipe.

Facts concerning Standard reinforced spiral pipe are presented in a new and attractive as well as informing way in a new catalogue, No. 7 of the Standard Spiral Pipe Works, Chicago. After remarking that the pipe is tested in hydraulic testing bench to guard against any possible defects that may have occurred during the manufacture, the book says: "If our form of seam is closely examined, it will be observed that the greater the internal pressure the tighter will be our seam. Efforts which have been made to break this seam have proven that the seam is the strongest part of the pipe. There are actually four thicknesses of steel in the seam and the pipe will withstand extreme pressures from without as well as from within." Attention is also called to the forged steel flanges made for joints. The processes of manufacture are described and finely illustrated.

How to Use Powdered Coal as Fuel.

Some confusion having been caused recently by conflicting statements published regarding the use of powdered coal and other fuels, and doubts having thus been raised in the minds of prospective users as to the real economies obtainable, and the safety and mechanical efficiency of handling and controlling powdered coal, the Quigley Furnace Specialties Company, 26 Cortlandt street, New York, in its Bulletin No. 11 has provided a full description of how to prepare, distribute and burn powdered coal with the equipment that it manufactures. This method, which, it is said, has been in successful operation for many months on a variety of furnaces, was developed as a result of twenty years' experience in the selection and application of fuels and also in furnace design and operation. The bulletin is amply and finely illustrated, the pictures being accompanied by complete descriptions and diagrams to show the system of operation.

Information as to Malleable Iron.

"Malleable Iron," a booklet which is described as an authentic treatise on its subject, is being issued gratuitously by the American Malleable Castings Association, Cleveland, O. This new publication, which is a forerunner of a comprehensive volume to be issued by the association, is full of valuable data. It has three parts, viz., Part 1, What Is Malleable Iron? Part 2, The American Malleable Castings Association; Part 3, The Uses of Malleable Iron Castings. Can Heavy Sections of Malleable Iron Be Completely Annealed? The Skin of a Malleable Iron Casting. Malleable Iron Castings Resist Rust. A copy of the booklet will be sent to anyone mentioning this paper if they send request to the association at its headquarters in Cleveland.

Peck Overlapping Pivoted Bucket Carriers.

Book No. 220 of the Link-Belt Company, Chicago, describes and illustrates the Peck overlapping pivoted bucket carrier for the economical and efficient carrying of coal, coke, ashes, cement, sand, ore, stone and other materials. This carrier is introduced as "the highest development of the conveying art." Its use and applications, already widespread, are constantly increasing. At no other time has there been greater or keener appreciation of the value of such devices than at present, when the scarcity of labor and its high cost makes the worth of improved mechanisms in aid of or as substitutes for human effort strikingly apparent. For almost half a century the organization of this company has been concentrated upon the design and manufacture of labor-saving conveyors, and its products now are of the latest development. The pictures in the book are fine; the reading matter is illuminating and complete.

Better Roads Absolutely Needed.

Simmons, Whitton & Co., contractors, Charlotte, N. C., have issued a booklet concerning the work done by them during the past year at several army camps for the Government. Some of the telling sentences in this little publication are as follows: "The problems of war transportation proved the possibilities of good roads and the tremendous handicap of poor roads. * * * There will never again be any disposition on the part of counties and States and the nation to build mere makeshift roads to last a few years, and then to be replaced at nearly the original cost. The road building of the future will be in the nature of permanent systems, or as nearly permanent as possible. It is useless expenditure and wanton extravagance to build other than a permanent type of road. * * * The increasing weight of

motor traffic has set a new standard for all road construction. * * * The illustrations in this booklet, which are mostly of panoramic character, are fine. The descriptions are pertinent and accurate.

A New Kind of Window.

"The Perfected Window." In a publication bearing the foregoing title are described and illustrated the merits of a new invention of G. W. Lancaster of Richmond, Va., which is marketed by the Perfected Window Co., whose office is at 206 Lyric Building, in that city. This is described as "a device to better old methods of ventilation, with metal shutters and screens all in one. It makes awnings and shades unnecessary. It is burglar, fire and fly proof." It is further stated that the invention is adaptable to all houses, old or new, is easily fitted to wooden or metal frames, and it is not necessary to have a skilled mechanic or carpenter to install it. The illustrations, each of which is accompanied by a description, make plain the advantages of the invention.

Coal-Handling Cableways.

Bulletin 34 of the Lidgerwood Manufacturing Co., 96 Liberty St., New York, relates to coal-handling cableways, the advantages of which are enumerated, it being claimed that they perform the entire function of storing and reclaiming, and, being overhead, they leave the ground free for storage purposes excepting for the small amount required for the towers. Other features include flexibility, simplicity, great capacity and economy, wide scope of operation possible, etc. Excepting for unusually large installations, only one man is required to operate a cableway. Several fine illustrations with accompanying descriptions show how these cableways are used.

Motor and Generator Brushes.

The Corliss Carbon Co. of Bradford, Pa., large exclusive manufacturers of motor and generator brushes, have just published Bulletin No. 6, which gives in condensed form up-to-date data on brushes. Copies may be obtained from the factory.

A Book for Young Machinists.

The fourth edition of the Starrett Book for Machinists' Apprentices has been issued by the L. S. Starrett Company, manufacturers of tools, Athol, Mass. This admirable book, which first appeared in the year 1915, constitutes Vol. I of the Starrett series. The authors are Howard P. Fairfield, assistant professor of machine construction at the Worcester Polytechnic Institute, and Carl S. Dow, S.B., editor in chief of Practical Mechanical Engineering and also of Practical Shop Work. It prepares the young or inexperienced machinist gradually for the further instruction to be obtained from the Starrett Data Book, which constitutes the second volume of the series. It is liberally and accurately illustrated with pictures showing various tools and their uses, the text going into details from the laying out of work to its completion. Moreover, it is a valuable reference book, embodying sundry mechanical formulas and tables.

Two Catalogs on Jeffrey Products.

"The Jeffrey Pivoted Bucket Carrier, Catalog No. 210." This is an unusually fine publication from the headquarters of the Jeffrey Manufacturing Company, Columbus, Ohio. It contains nearly 100 pages devoted to the manifold excellent features of the carriers made by this organization. It is beautifully illustrated, scarcely a page being without a picture to accompany the superior descriptive matter, which is of interest and informative character from beginning to end. Almost

all of the cuts are half-tones, wonderfully clear and true, while some of the others are like blueprints, but equally distinct and abounding in fidelity to details. The book is printed on heavy, calendered paper, and it is bound in substantial cloth. Another catalog from the same manufacturers is No. 245, relating to the Jeffrey Type A Shredder, which is especially valuable to industries of moderate size which have fibrous materials to be reduced, and, moreover, the machine is adjustable. The book is also finely illustrated and beautifully printed.

A Very Interesting Magazine.

"The Highway Magazine," published monthly in the interest of good roads, has a very attractive February number. This publication, which has its headquarters at the Transportation Bldg., Chicago, has been placed under new management, and a new editorial policy has been adopted. Much of its contents consists of first-hand material from various well-known writers on highway construction and maintenance, drainage and irrigation of roads and lands. As a result of the change the magazine has assumed a different aspect and is more than ever attractive and interesting. While "Armcō" products, made by the Armcō Iron Culvert and Flume Manufacturers' Association, are mentioned here and there, this advertising characteristic is kept in the background, and the general appearance and contents of the publication are superior. Arno B. Reincke is editorial director; Charles L. Benjamin, managing editor, and Charles B. Cory, Jr., associate editor.

Lidgerwood Hoist Bulletin.

Steam and electric hoists for mining and all other purposes, cableways, cableway excavators for open pit mining and stripping are described and extensively illustrated in Bulletin No. 19 of the Lidgerwood Manufacturing Co., 96 Liberty St., New York. The Lidgerwood steam mine hoists are especially emphasized in this publication, which is unusually interesting and complete. It is asserted that hoists of this make embody every improvement suggested by the long experience of the company, which has been making steam mine hoists since 1873 and electric mine hoists since 1890. Safety and continuous operation have been especially in mind in the design and construction of these hoists, which are built with particular regard to actual conditions and requirements. Strength, capacity, durability, smoothness of operation are all seen to, the results being the perfected machines now produced in increasing quantities. The pictures, tables and other data are all that can be desired.

Financial News

New Financial Corporations.

Ala., Collinsville.—First National Bank of Collinsville, a conversion of the Farmers & Merchants Bank, chartered; capital \$50,000; O. L. Hall, Prest.; Irby C. Hall and J. T. Seward, V.-Ps.; J. P. Cox, Cash.

Ark., Forrest City.—Forrest City Building & Loan Assn., capital \$1,000,000, Incptd. by S. L. Kirkpatrick, A. C. Bridwell, James M. Gilliam, W. W. Campbell and others.

Ark., Little Rock.—The American Bank of Commerce & Trust Co., a consolidation of the American National Bank, Bank of Commerce and the American Trust Co., is organized with \$550,000 capital; J. D. Goldman, St. Louis, Prest.; Herman Kahn, Chrmn. of Board; Ed. Cornish, Geo. W. Rogers, W. A. Hicks, J. W. Covey, Geo. A. Knox, J. F. Walker and R. W. Rightsell, V.-Ps.

Ark., Stamps.—Farmers' National Bank has applied for charter; capital \$25,000.

Fla., Fort Myers.—Fort Myers Guarantee Title & Trust Co., capital \$100,000, surplus \$50,000, is organized; Amos Bolick, Fort Myers; Harry E. Burt, Battle Creek, Mich., and E. F. Roreck, Metropolitan Trust Co., New York City.

Fla., Manatee.—Citizens' Bank of Manatee is being organized with \$16,500 capital; John T. Campbell of Bradenton, Prest.; Dr. H. J. English, Manatee, V.-P.; Col. Charles T. Curry, Bradenton, Secy.

Fla., Winter Garden.—First National Bank applied for charter; capital \$25,000.

Ga., Atlanta.—City Savings Bank, capital \$100,000, Incptd. by Samuel T. Weyman, Prest.; among those interested are W. Bayson Gibson, Andrew B. Chapman and others. (Lately noted.)

Ga., Wrightsville. — Farmers' Bank of Wrightsville chartered, capital \$50,000. Incorporators: R. B. Bryan and others.

Mo., Easton.—Farmers' State Bank, capital \$10,000, has filed articles of incorporation; directors, Truman Bowen, E. N. Van Horne, Michael Wogan, Esther G. Wogan and Don Digenan. Business is expected to begin in about 30 days.

Mo., Kansas City.—Fidelity National Bank & Trust Co., a conversion of the Fidelity Trust Co. of Kansas City, is chartered; capital \$1,000,000; Henry C. Flower, Prest.; A. D. Rider, Cashier.

N. C., Aberdeen.—Merchants & Farmers' Bank, authorized capital \$25,000, Incptd. by J. W. Graham, Alex. H. McLeod, J. A. Bryant, John Blue and W. A. Blue.

Okla., Nelagoney.—Citizens' State Bank applied for charter; capital \$15,000; organizers, M. O. Banowetz, Coffeyville, Kans.; A. E. Selby and John J. Freiburger, Nelagoney. Business will begin as soon as charter is granted.

Okla., Tonkawa.—Farmers' National Bank applied for charter; capital \$25,000.

S. C., Gaffney.—American State Bank has begun business with D. C. Ross, Prest.; R. L. Himes, V.-P.; Thomas D. Daniel, Cashier.

S. C., Greelyville.—Security Building & Loan Assn., Inc., capital \$50,000 to \$100,000. Petitioners: J. B. Alshrooks, T. W. Boyle and G. W. Green; business is to begin about June 1.

Tenn., Bradford.—Gibson County Bank, capital \$25,000, is organized with W. A. Crabtree, Prest.; W. L. Bryant, V.-P.; R. P. Yates, Cash.

Tenn., Lynnville.—People's Bank of Lynnville has begun business; capital \$25,000; E. E. Hall, Prest.; W. R. Smith, Cash.

Tex., Collinsville.—Collinsville National Bank, capital \$25,000, has begun business; W. J. McGaughey, Prest.; F. R. de Cordova, V.-P.; Joe B. Cober, Cashier.

Tex., Fort Worth.—National Bank of Commerce, capital \$1,000,000, is organized with C. J. Benson, Prest.; C. H. Patterson, A. E. Thomas and H. J. Jackson, V.-Ps.

Tex., Temple.—Mayor J. K. Campbell denies the report that the Security National Bank is being organized in Temple.

Va., Norfolk.—General Finance Corp., capital \$10,000 to \$50,000, organized with Benjamin J. Burrows, Prest.; W. W. Preston, Secy.

Va., Norfolk.—Loyalty Investment Corp., capital \$5000 to \$10,000, organized by Jacob B. Spencer, Prest.; C. Leonard Steward, Secy.

Va., Portsmouth.—Industrial Loan Corp., authorized capital \$50,000, is organized with

W. V. Gresham, Prest.; J. C. Emmerson, Secy. Treas.; business is expected to begin about May 10 at 423 High St.

W. Va., Huntington.—Security Savings Co., capital \$100,000, is organized with William R. Thompson, Prest; Dan H. Holton, V.-P.; William G. Holswade, Treas., and Carl G. Douthitt, Secy.

W. Va., Williamsburg.—Bank of Williamsburg, capital \$25,000, Incptd., by J. W. McClung, Trout; V. G. Judy, Cornstalk; J. L. Wyatt, H. S. Cooper, Williamsburg, and others.

W. Va., Kermit.—Kermit Real Estate & Insurance Co. Incptd., authorized capital \$50,000, began business May 1. Incorporators: W. M. Hale, D. W. Farquharson, Pyrrhus Meade, R. L. Pinson, Everett Leftwich and others.

W. Va., South Charleston.—First National Bank chartered; capital \$35,000; Quince Jones, Prest.; J. M. Schwender, Cashier.

New Securities.

Ark., Augusta—(Road).—\$150,000 of Woodruff County bonds have been sold at a premium to a St. Louis firm. Address County Commsrs.

Ark., Earle—(School).—Earle Special School Dist., Crittenden County, has sold \$100,000 of bonds to the Crittenden County Bank & Trust Co.

Ark., Gould—(Road).—Bids received 1 P. M. May 14 for \$55,000 of bonds Douglas-Gould-Star City Road Dist.; W. E. Massy, Chrmn., and W. W. Douglas, Secy.

Ark., Osceola—(Road).—\$800,000 of 6 per cent. Leachville-Manilla-Blytheville road bonds, Mississippi County, have been purchased by Roy W. Gould of Little Rock.

Ark., Monticello—(Road).—\$200,000 of 6 per cent. bonds Taylor Road Dist., Drew County, have been purchased by W. W. Elkins, Sheridan, Ark.

Ark., Prescott—(Road).—\$135,000 of 6 per cent. improvement bonds Prescott and Blevins Road Improvement Dist. have been sold to I. B. Tigrett & Co., Jackson, Tenn.

Fla., Bunnell—(Road, Bridge).—\$90,500 of 6 per cent. bonds Shell Bluff Special Road and Bridge Dist., Flagler County, have been purchased by G. B. Sawyers & Co., Jacksonville.

Fla., The Land—(School).—\$25,000 of 6 per cent. 2-2 year bonds Volusia County Special Tax School Dist. No. 23 have been purchased at a premium and accrued interest by Geo. B. Sawyers & Co., Jacksonville.

Fla., Gainesville—(School).—Special School Tax Dist. No. 26, Alachua County, votes May 20 on \$150,000 of 5 per cent. \$1000 denomination bonds, maturing 1936 to 1950, inclusive; B. R. Colson is Chrmn. and E. R. Simmons, Secy. Board of Public Instruction.

Fla., Green Cove Springs—(Road).—Clay County Commsrs. have ordered an election to vote on \$50,000 of bonds.

Fla., Okeechobee—(Road).—\$300,000 of Okeechobee County bonds to be voted on May 3 are 6 per cents. Address R. P. Fletcher.

Fla., Plant City—(Street, Fire Department). The \$60,000 of street paving and \$10,000 of motor fire-apparatus bonds to be voted on June 24 are 20-year 6 per cents.; date for opening bids not decided; Claude B. Root is Mayor.

Fla., Safety Harbor—(Town Improvement). Town has sold \$11,000 of 6 per cent. 30-year \$500 denomination bonds at \$10,450 and accrued interest to the Bank of Clearwater, Clearwater, Fla.

Fla., St. Petersburg—(School).—Bids will be opened June 12 for the \$75,000 of 6 per cent. 30-year Special Tax School Dist. No. 3 bonds. W. A. Allen is Chrmn. and Dixie M. Hollins, Secy. Board of Public Instruction.

Fla., West Palm Beach—(Auditorium).—City will probably issue \$110,000 of bonds for erecting and furnishing building. Address The Mayor.

Fla., Winter Park—(Public Improvements). \$30,000 of bonds are voted. Address The Mayor.

Ga., Albany—(Highway).—Dougherty County votes May 21 on \$400,000 of bonds. Address County Commsrs.

Ga., Dawson—(Road).—Terrell County will vote on \$150,000 of bonds. Address County Commsrs.

Ga., Fort Valley—(School).—City voted \$15,000 school annex and \$24,000 paving bonds. H. C. Neil is Mayor.

Ga., Madison—(Road).—Morgan County votes May 20 on \$325,000 of bonds. Address County Commsrs.

Ga., Milledgeville—(Sewer, Water, School).—City votes June 11 on \$5000 sewer, \$93,000 water-works and \$47,000 school-building bonds. Address The Mayor.

Ga., Monroe—(Road).—Walton County Apr. 17 voted \$200,000 of 5 per cent. bonds; dated May 1, 1919; maturity 1939. T. C. Aycock is Chrmn. Board of County Commsrs.

Ga., Morgan—(Road).—Calhoun County votes June 24 on \$150,000 of bonds. Address County Commsrs.

Ga., Newnan—(Road).—Coweta County voted \$480,000 of bonds. Address County Commsrs.

Ga., Statesboro—(Highways).—Bullock County votes June 5 on \$400,000 of 5 per cent. 25-year \$1000 denomination highway bonds. Address County Commsrs.

Ga., Thomasville—(Highways).—Thomas County voted \$700,000 of bonds. Address County Commsrs.

Ga., Valdosta—(Road).—The \$500,000 of Lowndes County bonds to be voted on May 28 are 1-30 year 5 per cents.; dated July 1, 1919; denomination \$1000; L. M. Stanfill is Chrmn. Board of Commsrs. of Roads and Revenues and Lowndes County.

Ga., Washington—(Water, School, Street).—City voted \$55,000 of bonds as follows: Water-works and cemetery improvement, \$7000; street, \$28,000; high school, \$20,000. They will soon be offered for sale. K. A. Wilheit is Mayor.

Ga., Washington—(Road).—Wilkes County votes June 11 on \$300,000 of 5 per cent. 10-30 year bonds. Address County Commsrs. E. A. Barnett, Chrmn.

La., Cameron—(Road).—Bids will be opened June 2 for the following 5 per cent. 25-year \$1000 denomination bonds, Cameron Parish, dated Feb. 1, 1919; \$230,000 Dist. No. 3; \$100,000 Dist. No. 4; \$60,000 Dist. No. 5; J. W. Doxey is Prest. Board of Commsrs. of Cameron Parish; Gayee & Porter, Attnys. for Road Dists., Lake Charles, La.

La., De Ridder—(Water, Light).—April 22 city defeated \$90,000 of bonds. R. J. O'Neal, Clerk.

La., De Ridder—(Road).—Bids will be received until 2 P. M. June 4 for \$80,000 of 5 per cent. 20-year bonds, dated May 1, 1919; J. H. Derk, Secy. Board of Supvrs., Road Dist. No. 4, Beauregard Parish. Further particulars will be found in the Proposals Department.

La., Marksville—(Road).—Election ordered for Apr. 26 to vote on \$1,000,000 Avoyelles Parish bonds is called off; June 20 will vote on \$1,500,000 issue. Address Clerk of Police Jury.

La., Norwood—(School).—Election is to be called to vote on \$15,000 of bonds. Address School Board.

La., Shreveport—(School).—Bids received 1.30 P. M. May 20 for \$40,000 of 5 per cent.

bonds School Dist. No. 9, Caddo Parish, dated July 1, 1919, and maturing 1921 to 1933; denomination \$1000. Address School Board, C. E. Byrd, Treas. and Supt.

La., Winniboro—(School).—Franklin Parish School Board, Jno. L. McDuff, Supt., April 22 sold at par and accrued interest \$75,000 of 5 per cent. 30-year \$250 and \$500 denomination bonds to the Commercial Trust & Savings Bank, New Orleans.

Miss., Canton—(Highway).—Bids received 11 A. M. May 6 for \$100,000 of 6 per cent. \$500 denomination Madison County bonds, dated May 6, 1919, and maturing 1920 to 1939, inclusive; D. C. McCool is Clerk Board of Supvrs.

Miss., Cleveland—(School).—Cleveland Consolidated School Dist., Bolivar County, votes May 19 on \$100,000 of bonds. Address Board of Supvrs.

Miss., Hattiesburg—(Improvement).—Bids received 2 P. M. May 15 for \$60,000 of 6 per cent. 20-year serial bonds; T. E. Batson, Mayor. Further particulars will be found in the Proposals Department.

Miss., Meridian—(Road).—Notice is given that the Board of Supvrs. of Road Dist. 4, Lauderdale County, will call a special election to vote on bonds maturing not later than 25 years and interest, not to exceed 6 per cent.; W. R. Pistole is Clerk of the Board.

Miss., Port Gibson—(Light).—All bids received April 5 for the \$25,000 of 6 per cent. 1-20 year \$500 denomination bonds voted March 30 were rejected; date for opening new bids not decided. Address The Mayor.

Miss., Senatobia—(Light, Water).—City voted \$15,000 bonds for water-works and light plant. Address The Mayor.

Mo., Jefferson City—(Highway).—State will vote in Nov. on \$60,000,000 of 5 per cent. bonds. Address The Governor.

Mo., Charleston—(Drainage).—Bids will be received until noon May 14 by Frank M. Lee, Treas. of Mississippi County, for \$100,000 of 6 per cent. 20-year \$500 denomination bonds Drainage Dist. 32, Mississippi County (Maple Slough Joint Drainage Dist.), dated May 15, 1919, and maturing 1922 to 1939, inclusive.

Mo., Jefferson City—(Courthouse).—Cole County voted \$100,000 of bonds. Address County Commsrs.

Mo., New Madrid—(Drainage).—Bids received until noon May 15 by S. R. Hunter, Jr., Treas., New Madrid County, for \$53,000 of 6 per cent. 20-year \$500 denomination bonds Drainage Dist. No. 31 (Maple Slough Joint Drainage Dist.), dated May 15, 1919; maturity 1922 to 1939, inclusive.

Mo., Ozark—(Courthouse).—\$90,000 of 5 1/2 per cent. 10-year Christian County bonds have been purchased by Francis Bros. & Co., St. Louis.

Mo., Sedalia—(Road).—Pettis County votes June 2 on \$60,000 of bonds to improve roads. Address County Commsrs.; C. W. Denny is Highway Engr.

Mo., Sedalia—(Hospital, etc.).—City votes May 20 on bonds as follows: Garbage reduction plant, \$50,000; hospital, \$10,000; city hall improvements, \$5000. Address The Mayor.

Mo., St. Joseph—(City Hall, Hospital).—City votes May 27 on \$450,000 city hall and \$100,000 hospital bonds. Address The Mayor.

Mo., St. Louis—(School).—Belleville Dist. votes May 17 on \$200,000 of bonds. Address Board of Education.

N. C., Asheville—(School).—Swannanoa Special School Dist., Buncombe County, votes June 24 on \$12,500 of bonds. Address County Commsrs.

N. C., Charlotte—(City).—Bids will be received until noon May 15.

(Continued from Page 130.)

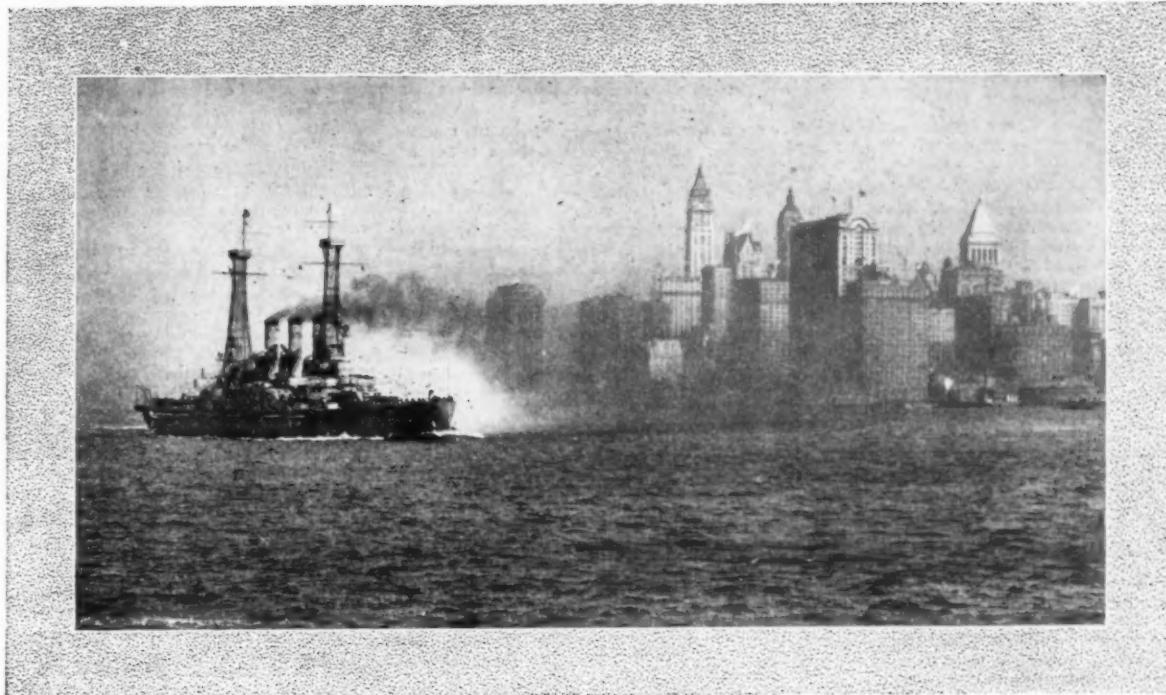


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THE BATTLESHIP’S mighty efficiency is measured by her ability to exploit every pound of coal without waste. Consequently, all boilers and steam pipes must be insulated with the most effective Heat-Insulation obtainable.

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wise, winter life in these giant structures would be impossible.

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ceived until noon May 10 for the following loans: \$50,000 representing a matured bond issue and another of \$220,000, being the city's floating debt; notes are dated May 13 and mature 90 days thereafter; F. R. McNinch is Commr. of Finance.

N. C., Elizabeth City—(Road).—Bids will be received until May 18 for \$500,000 of 5 per cent. Pasquotank County bonds; W. J. Woodley is Chrmn. Highway Commission.

N. C., Greenville—(Water).—\$50,000 of 5 per cent. \$1000 denomination bonds, dated July 1, 1919, and maturing 1920 to 1944, inclusive, have been purchased by R. M. Grant & Co., New York, at a premium.

N. C., Jefferson—(Road).—Ashe County voted \$600,000 of bonds. Address County Commsrs.

N. C., Jefferson—(Road).—Ashe County voted \$600,000 of bonds, and bids for same will soon be asked. Address County Commsrs.

N. C., Roxboro—(Road).—\$225,000 of an authorized issue of \$500,000 of 5 per cent. Person County bonds have been purchased at \$226,125 by J. C. Mayer & Co., Cincinnati, Ohio.

N. C., Townsville—(Railway).—Townsville Township voted May 9 on \$75,000 of 5 per cent. 20-year bonds to purchase railway. W. C. Tucker, Clk.

N. C., Washington—(Road).—Beaufort County, April 29, voted \$1,000,000 of bonds. Address County Commsrs.; F. C. Kugler, Chrmn.; V. von Gemmingen is Highway Engr.

Okla., Blanchard—(Water, Light).—Election May 2 on \$45,000 water and \$15,000 light bonds. Address Board of Trustees.

Okla., Biggs—(Water, Sewer).—\$25,000 of 6 per cent. 25-year water, sewer extension and filtration bonds have been purchased at a premium by Stacy S. Potter. Address The Mayor.

Okla., Chandler—(Water, Park, Sewer).—\$25,000 of 6 per cent. 25-year bonds have been purchased by the First National and the Union National banks, Chandler.

Okla., Clarence—(Sewer, Water).—City is reported to have sold the following 6 per cent. 15-year bonds: \$40,000 storm sewer, \$22,000 sewerage-disposal and \$20,000 water bonds. Address The Mayor.

Okla., Eufaula—(Water).—City is reported to have sold \$40,000 of bonds. Address The Mayor.

Okla., Frederick—(Sewer).—City will, on May 13, sell \$150,000 of 30-year sanitary-sewer bonds. D. W. Womack is City Clerk.

Okla., Henryetta—(Water-works).—Bids received 2 P. M. May 13 for \$310,000 of 5 per cent. 5-20-year bonds voted Apr. 23, 1919, and dated May 15, 1919. Board of Commsrs. reserves the right to reject any and all bids and to auction the bonds off at any time should sealed bids be unsatisfactory. Ira Martin is Mayor and H. B. Evans, City Clk. Further particulars will be found in the Proposals Department.

Okla., Idabel—(Sewer).—Attorney-General has approved \$70,000 of sanitary-sewer bonds. Address The Mayor.

Okla., Idabel—(Courthouse, Jail).—McCurtain County has voted \$125,000 of bonds for erection of courthouse and jail; the bonds have been purchased by E. D. Edwards of Oklahoma City; H. A. Smith is County Clerk.

Okla., Tulsa—(School).—Attorney-General has approved \$31,000 of bonds School Dist. No. 23, Tulsa County. Address County Commsrs.

Okla., Walters—(Water-works).—Attorney-General has approved \$25,000 water-works, \$15,000 electric-light and \$500 sewer bonds. Address The Mayor.

Pa., Erie.—City, May 13, will sell \$1,000,000 of 4½ per cent. 5-20-year coupon bonds; T.

Hanlon is City Clerk. Further particulars will be found in the Proposals Department.

S. C., Abbeville—(Street).—City voted May 13 on \$90,000 of not exceeding 5½ per cent. 30-year bonds. J. Moore Mars is Mayor and T. G. Perrin, City Clerk.

S. C., Greenville—(Road).—Greenville County Commsrs. will, it is stated, issue \$55,000 of bonds.

S. C., York—(Street).—Bids received until noon May 15 for \$50,000 of 20-40-year bonds; interest not exceeding 6 per cent. I. W. Johnson is Mayor. Further particulars will be found in the Proposals Department.

Tenn., Bristol—(School).—\$20,000 of 6 per cent. 30-year \$1000 denomination bonds will soon be offered for sale. Address The Mayor.

Tenn., Bristol—(Fire Department).—\$8000 school and \$13,000 fire-department bonds have been purchased at par by F. C. Hoehler & Co., Toledo, Ohio.

Tenn., Chattanooga—(School).—City sold \$500,000 of 5 per cent. bonds at \$5407 premium to Caldwell & Son, Nashville. Jesse M. Littleton, Mayor.

Tenn., Clinton—(Fire Department Equipment).—Election to vote on \$2500 of \$1000 denomination bonds will probably be called in about 30 days; T. U. Crowley is Mayor.

Tenn., Madisonville—(Road).—Bids received 10 A. M. May 12 for three issues of 10-year \$500 denomination, not exceeding 6 per cent. Monroe County bonds, aggregating \$44,500, as follows: \$30,000, \$7500 and \$7000. H. B. Witt is County Judge and C. J. Spurling, Clk. County Court. Further particulars will be found in the Proposals Department.

Tenn., Tazewell—(Road, Bridge).—\$185,500 of 5½ per cent. 26-year Claiborne County road and bridge bonds have been purchased by J. B. Tiggert & Co., Jackson.

Tenn., Waverly—(Road).—\$100,000 of 6 per cent. 20-year Humphreys County bonds have been purchased at a premium by Caldwell & Company, Nashville.

Tex., Anahuae—(Road).—Chambers County, April 26, defeated \$55,000 of bonds Road Dist. No. 4; Joe F. Willson, County Judge.

Tex., Anson—(Highway).—Jones County will probably vote on bonds. Address County Commsrs.

Tex., Beeville—(Road).—Bids will be opened May 12 for \$200,000 of an authorized issue of \$60,000 of 5½ per cent. 1-30 year \$1000 denomination bonds voted Apr. 19. Address Bee County Commsrs.; P. M. Cox, County Judge.

Tex., Boerne—(Road).—Road Dist. 1, Kendall County, voted \$50,000 of 5½ per cent. serial \$1000 denomination bonds. J. A. Phillip is County Judge.

Tex., Cameron—(Road).—Election is to be held in Dist. No. 25 (Yarrelton), Milam County, to vote on \$50,000 of bonds. Address County Commsrs.

Tex., Cuero—(Road).—Bids will be opened May 13 for \$40,000 of 5 per cent. 20-year \$500 denomination bonds, Road Dist. No. 4, De Witt County, dated Oct. 10, 1918, and maturing Oct. 10, 1948. Address Commsrs' Court, J. L. Boddie.

Tex., Eagle Lake—(Drainage).—Drainage Dist. No. 3 will issue \$110,000 of bonds. Address Board of Commsrs.

Tex., Fort Worth.—Ordinance has been introduced in the city council providing for the sale of \$1,890,000 of 5 per cent. 10-40 year \$1000 denomination bonds recently voted. Address The Mayor.

Tex., Gainesville—(Road).—Cooke County votes May 17 on \$1,500,000 of bonds; H. S. Holman is County Judge. (Lately noted.)

Tex., Gilmer—(Road).—City and Upshur County voted \$1,000,000 of 4½ per cent. 20-40-

year \$1000 denomination bonds. D. W. Aiken is County Judge, and T. H. Briggs, Mayor.

Tex., Greenville—(Road).—\$1,600,000 of bonds Hunt County Special Road Dist. have been sold at par and accrued interest to E. H. Rollins & Sons, the Commerce Trust Co., Smith-Moore Co., the National City Bank and Redmon Co., all of Chicago.

Tex., Hillsboro—(Road).—Hill County Dists. voted \$1,160,000 of bonds as follows: Hillsboro, \$81,000; Itasca, \$350,000. Address County Commsrs.

Tex., Karnes City—(Road).—Election ordered May 3 to vote on \$1,000,000 Karnes County bonds is reported postponed for 60 days. Address County Commsrs.

Tex., Kaufman—(Road).—Terrell Dist., Kaufman County, has voted \$500,000 of bonds. Address County Commsrs.

Tex., Marshall—(Road).—Harrison County will sell \$1,450,000 of the \$1,750,000 of 5 per cent. 1-40 year \$1000 denomination bonds voted Apr. 19. Date for opening bids not decided. Address Commsrs' Court, Harrison County.

Tex., Mineral Wells—(Water).—Atty.-Gen. has approved \$167,500 of 5 per cent. 20-40-year bonds. Address The Mayor.

Tex., Nacogdoches—(Road).—Nacogdoches County, J. M. Marshall, Judge, votes May 27 (not May 20) on \$800,000 of 5½ per cent. bonds. (Lately noted.)

Tex., Orange—(Dock, Wharf Improvement).—Date not yet decided for opening bids for the \$150,000 of 5 per cent. 20-40-year \$1000 denomination bonds voted in March; O. R. Sholars, Mayor.

Tex., Pharr—(Street).—\$10,000 of 7 per cent. street warrants, dated Apr. 9, 1919, and maturing serially 1920 to 1947, inclusive, have been purchased by J. L. Arlitt, Austin, Tex.

Tex., Quitman—(Road).—Precinct 7, Wood County, voted \$100,000 of bonds. Address County Commsrs.

Tex., Sherman—(School).—Dixie School Dist., Grayson County, voted \$400 of bonds. Address School Board.

Tex., Sherman—(School).—Election will probably be held in June to vote on \$60,000 of bonds. Address School Board, H. O. Harrington, Prest.

Tex., Sinton—(Road).—Sinton Road Dist., San Patricio County, voted \$235,000 of bonds. Address County Commsrs.

Tex., Stamford—(Paving).—City will vote on \$20,000 of bonds. Address The Mayor.

Tex., Waxahachie—(School).—Telico School Dist., Ellis County, votes May 17 on \$12,000 of bonds. Address County Commsrs.

Tex., Wichita Falls—(School).—Bids received May 19 by W. J. Bullock, Prest. Board of Education, for \$100,000 of 5 per cent. bonds.

Tex., Weatherford—(Road).—Parker County Apr. 26 voted \$800,000 of 5 per cent. 30-year \$1000 denomination bonds. E. A. Swofford is County Judge.

Tex., Woodville—Tyler County voted \$800,000 of bonds. Address County Commsrs.

W. Va., South Charleston—(Sewer).—Special dispatch to Manufacturers Record confirms report that city voted \$144,500 of bonds. A. Bennett is Mayor.

W. Va., Charleston—(School).—Steps are being taken to call an election to vote on \$250,000 of bonds. Address School Board.

W. Va., Moundsville—(Improvement).—City plans to vote on \$60,000 of bonds for improvements, including paving and sewerage. Address The Mayor.

W. Va., Fairmont—(School).—City votes May 29 on \$150,000 of high-school bonds. Address Board of Education.

(Continued on Page 132.)

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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INTERNATIONAL TRADE AND INDUSTRIAL BUREAU

120 Broadway
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Financial Notes.

Bank of Hyde, Swann Quarter, N. C., will increase capital to \$100,000.

First National Bank of Iowa Park, Tex., increased capital from \$25,000 to \$100,000.

Guaranty State Bank of Goose Creek, Tex., increased capital from \$10,000 to \$15,000.

First Trust & Savings Co., Clarksville, Tenn., increased capital from \$75,000 to \$100,000.

Pulaski National Bank, Pulaski, Va., increased capital from \$50,000 to \$150,000.

First National Bank, Portsmouth, Va., increased capital from \$100,000 to \$200,000.

Citizens' Bank, Norfolk, Va., increased capital from \$60,000 to \$1,000,000.

First National Bank, Huntington, W. Va., plans to increase capital from \$575,000 to \$1,000,000.

Citizens' Savings & Loan Corp., Charlotte, N. C., has changed name to the Citizens' Sav-

ings & Loan Co., and increased capital to \$200,000.

Rockingham National Bank, Harrisonburg, Va., increased capital from \$60,000 to \$100,000.

Exchange National Bank, Tulsa, Okla., plans to increase capital from \$1,000,000 to \$1,250,000.

Alamance Loan & Trust Co., Raleigh, N. C., increased capital from \$100,000 to \$300,000.

Farmers' Loan & Trust Co., Tarboro, N. C., increased capital from \$25,000 to \$100,000.



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